APPENDIX J

Comment Letters Received

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Comment Letter 1

CHEMEHUEVI

CULTURAL CENTER

December 3, 2013

ESA Energy
550 Kearny ST
STE 500
San Francisco, CA 94108

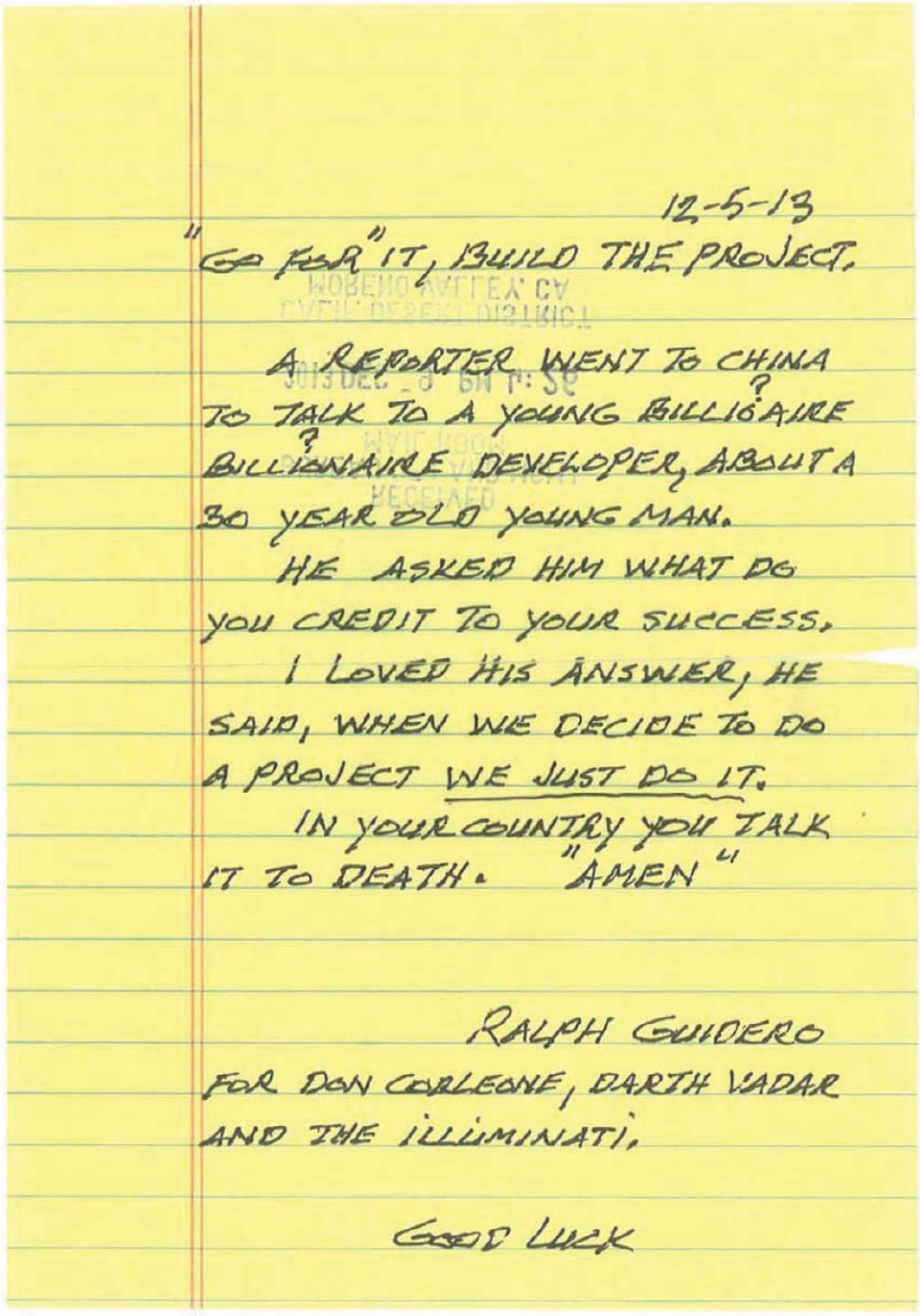
Dear Sir or Ms,

We are in receipt of your letter regarding the Soda Mountain Solar Project, dated November 27, 2013. Having reviewed the Draft PA/EIS/EIR, we have no specific comments. However, if, during construction, there is evidence of a burial site or material objects, we request all activity cease and for us to be contacted immediately. 1-1

Sincerely,

Jay Cravath, Ph.D.
Cultural Director

MAILING : PO. BOX 1976
PHYSICAL : 1991 PALO VERDE DR.
CHEMEHUEVI VALLEY CA 92363
OFFICE 760 874 3052
FAX 760 858 5400
WWW.CHEMEHUEVI.NET



12-5-13

"GO FOR" IT, BUILD THE PROJECT.

A REPORTER WENT TO CHINA TO TALK TO A YOUNG BILLIONAIRE? BILLIONAIRE DEVELOPER, ABOUT A 30 YEAR OLD YOUNG MAN.

HE ASKED HIM WHAT DO YOU CREDIT TO YOUR SUCCESS.

I LOVED HIS ANSWER, HE SAID, WHEN WE DECIDE TO DO A PROJECT WE JUST DO IT.

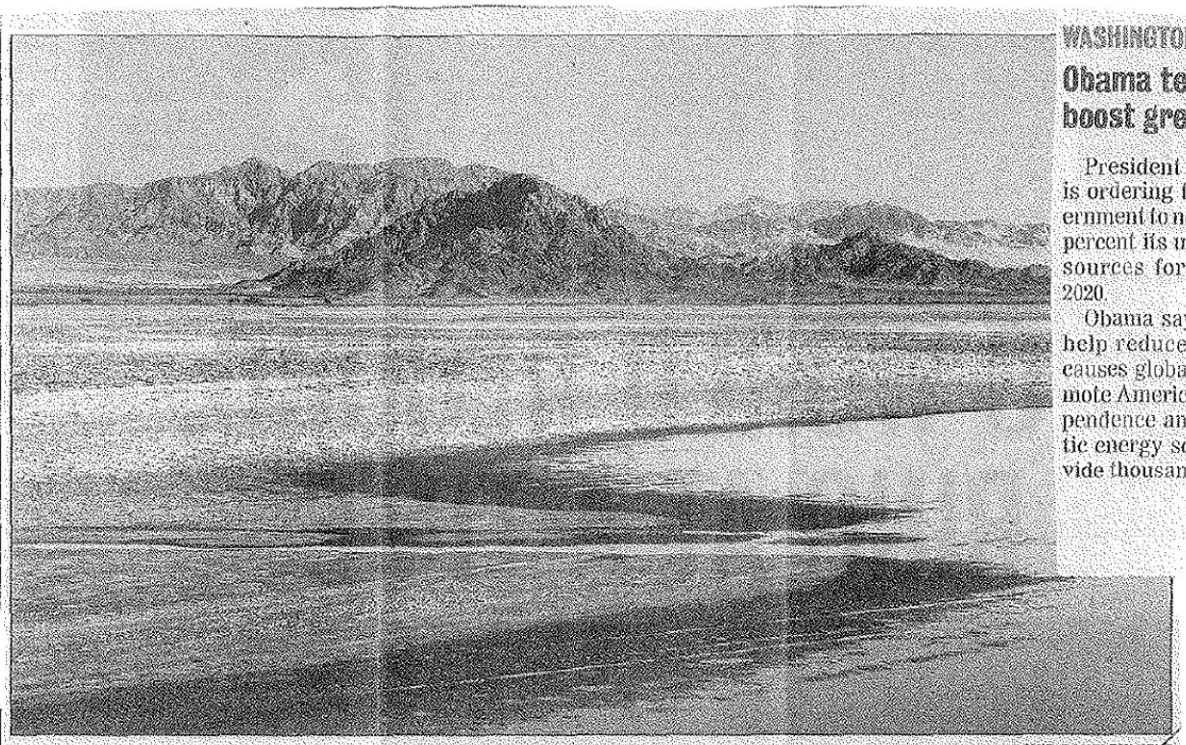
IN YOUR COUNTRY YOU TALK IT TO DEATH. "AMEN"

RALPH GUIDERO

FOR DON CORLEONE, DARTH VADAR AND THE ILLUMINATI.

GOOD LUCK

2-1



DAVID DANELSKI/STAFF

Soda Lake in the Mojave National Preserve reflects the sky. A commercial solar project is proposed within a mile of the lake bed, prompting worries about water depletion and the fate of an endangered fish, among other concerns.

WASHINGTON

Obama tells feds to boost green energy

President Barack Obama is ordering the federal government to nearly triple to 20 percent its use of renewable sources for electricity by 2020.

Obama says the plan will help reduce pollution that causes global warming, promote American energy independence and boost domestic energy sources that provide thousands of jobs.

Comments sought on project

The planned solar development next to Mojave National Preserve has drawn criticism

BY DAVID DANELSKI
STAFF WRITER
ddanelski@pe.com

Federal officials are taking public comments on a draft environmental study that evaluates plans for a commercial-scale photovoltaic solar development on public land near Mojave National Preserve.

The Bureau of Land Management is handling the energy project application. The comment period closes Feb. 26.

The Soda Mountain Solar Project is proposed by Bechtel, the nation's largest construction and engineering firm. According to the company, the operation at peak production would generate 358 megawatts, enough electricity to power 116,300 homes.

The development has drawn opposition from the National Park Service and environmental groups because its footprint would be within a mile of the national preserve, a 1.6 million-acre park established in 1994 to protect the landscapes, wildlife and history of the eastern Mojave Desert. Among the concerns: loss of quality wildlife habitat, negative effects on bighorn sheep that range in the surrounding mountains, and potential harm to water sources needed by a nearly extinct fish.

Bechtel officials have said the site has plentiful sunshine, nearby power lines and fewer environmental issues than other locations. Some of the project area already has been disturbed by a freeway, mines and pipelines, they have said.

The development would create 200 jobs during construction, which could start next summer if Bechtel obtains the necessary approvals.

Public meetings are planned in Barstow but are not yet scheduled.

The draft environmental study and other documents are available on the BLM website: www.blm.gov/ca/st/en/fo/barstow.html.

Written comments may be sent to Jeff Childers, Soda Mountain Solar Project Manager, 22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553, or to sodamtnsolar@blm.gov.

Childers can be reached at 951-697-5308.

Follow David Danelski on Facebook at www.facebook.com/DanelskiReports and Twitter @DavidDanelski

2-1 cont.

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Wednesday, February 12, 2014 12:18 PM
To: Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Traffic Study

---------- Forwarded message ----------
From: **Harrell, Dina D@DOT** <dina.harrell@dot.ca.gov>
Date: Thu, Dec 19, 2013 at 11:01 AM
Subject: Traffic Study
To: "sodamtnsolar@blm.gov" <sodamtnsolar@blm.gov>
Cc: "Kopulsky, Dan E@DOT" <dan.kopulsky@dot.ca.gov>

Good morning, we (Caltrans, Planning) has received an Notice of Completion Environmental Document Transmittal for the above project. It was sent to our Traffic Operations Department for comments. The Operations Department would like to know if a Traffic Study has been done on this project for the impact of I 15. Please let me know as soon as possible. Thank you for your time. 3-1

Dina Harrell

Caltrans Planning

464 W. 4th St - 6th Floor

San Bernardino, CA 92401

(909) 388-7139

SATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
Web Site www.nahc.ca.gov
Ds_nahc@pacbell.net
e-mail: ds_nahc@pacbell.net

January 2, 2014

Chris Conner
County of San Bernardino Land Use Service Agency
385 North Arrowhead Avenue
San Bernardino, CA 92415-0182

RE: SCH#2012101075 Joint NEPA/CEQA Document; draft Environmental Impact Statement / Environmental Impact Report (DEIS/DEIR) for the **"Soda Mountain Solar Project;"** located in the Baker area; Mojave Desert; San Bernardino County, California

Dear Chris Conner

The Native American Heritage Commission (NAHC) has reviewed the above-referenced environmental document. This project is also subject to California Government Code Sections 65040.2, *et seq.* 4-1

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required: 4-2

Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR). 4-3

If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10. 4-4

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence. 4-5 4-6

California Government Code Section 65040.12(e) defines "environmental justice" to provide "fair treatment of People...with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies" and Executive Order B-10-11 requires consultation with Native American tribes their elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities. 4-7

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). 4-8

Lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a). Then if the project goes ahead then, lead agencies include in their mitigation and monitoring plan provisions for the analysis and disposition of recovered artifacts, pursuant to California Public Resources Code Section 21083.2 in consultation with culturally affiliated Native Americans. 4-9

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. 4-10

Sincerely,

Dave Singleton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
San Bernardino County California
January 2, 2014

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 — Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

San Manuel Band of Mission Indians
Carla Rodriguez, Chairwoman
26569 Community Center Drive — Serrano
Highland , CA 92346
(909) 864-8933
(909) 864-3724 - FAX
(909) 864-3370 Fax

Joseph R. Benitez (Mike)
P.O. Box 1829 — Chemehuevi
Indio , CA 92201
(760) 347-0488
(760) 408-4089 - cell

Chemehuevi Reservation
Edward Smith, Chairperson
P.O. Box 1976 — Chemehuevi
Chemehuevi Valley CA 92363
chair1cit@yahoo.com
(760) 858-4301
(760) 858-5400 Fax

Fort Mojave Indian Tribe
Timothy Williams, Chairperson
500 Merriman Ave — Mojave
Needles , CA 92363
(760) 629-4591
(760) 629-5767 Fax

Colorado River Indian Tribe
Wayne Patch, Sr. ,Chairman
26600 Mojave Road — Mojave
Parker , AZ 85344 — Chemehuevi
crit.museum@yahoo.com
(928) 669-9211-Tribal Office
(928) 669-8970 ext 21
(928) 669-1925 Fax

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838 — Fernandeño
Newhall , CA 91322 — Tataviam
tsen2u@hotmail.com — Serrano
(661) 753-9833 Office — Vanyume
(760) 885-0955 Cell — Kitanemuk
(760) 949-1604 Fax

AhaMaKav Cultural Society, Fort Mojave Indian
Linda Otero, Director
P.O. Box 5990 — Mojave
Mohave Valley AZ 86440
(928) 768-4475
LindaOtero@fortmojave.com
(928) 768-7996 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012101075; Joint NEPA/CEQA Documenbt; draft EIS/EIR for the Soda Mountain Solar Project; located in the Baker area; San Bernardino County, California.

Native American Contacts
San Bernardino County California
January 2, 2014

Morongo Band of Mission Indians
William Madrigal, Jr.,Cultural Resources Manager
12700 Pumarra Road Cahuilla
Banning , CA 92220 Serrano
(951) 201-1866 - cell
wmadrigal@morongo-nsn.gov
(951) 572-6004 Fax

Ernest H. Siva
Morongo Band of Mission Indians Tribal Elder
9570 Mias Canyon Road Serrano
Banning , CA 92220 Cahuilla
siva@dishmail.net
(951) 849-4676

San Manuel Band of Mission Indians
Daniel McCarthy, M.S.., Director-CRM Dept.
26569 Community Center. Drive Serrano
Highland , CA 92346
(909) 864-8933, Ext 3248
dmccarthy@sanmanuel-nsn.gov
(909) 862-5152 Fax

Las Vegas Paiute Tribe
Attn: Cultural Resources Department
1 Paiute Drive Paiute
Las Vegas , NV 89106
contact@lvpaiute.com

(702) 386-3926
(702) 383-4019 - FAX

Fort Mojave Indian Tribe
Nora McDowell, Aha Makav Society
P.O. Box 5990 Mojave
Needles , CA 92363
(928) 768-4475
noramcdowall-antone@fortmojave.com
(760) 629-5767 Fax

Twenty-Nine Palms Band of Mission Indians
Anthony Madrigal, Jr, THPO Officer
46-200 Harrison Place Chemehuevi
Coachella , CA 92236
amadrigal@29palmsbomi-nsi.gov
760-863-2444
760-625-7872-cell
760-863-2449 - Fax

Serrano Nation of Mission Indians
Goldie Walker, Chairwoman
P.O. Box 343 Serrano
Patton , CA 92369

(909) 528-9027 or
(909) 528-9032

MOAPA Band of Paiutes
William Anderson, Chairperson
P.O. Box 340 Paiute
Moapa , NV 89025
(702) 865-2077-Env Office
www.moapabandofpaiute-nsn.gov

This list is current only as of the date of this document.

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Comment Letter 4

Native American Contacts
San Bernardino County California
January 2, 2014

Pahrump Paiute Tribe
Richard Arnold, Chaiarperson
P.O. Box 3411 Paiute
Pahrump , NV 89041-

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012101075; Joint NEPA/CEQA Documenbt; draft EIS/EIR for the Soda Mountain Solar Project; located in the Baker area; San Bernardino County, California.

To whom it may concern:

When people ask me to tell them something unusual about myself the first thing that comes to mind is out of the 28 years of my life I have only spent 3 of them at home for thanksgiving. My family tradition has always led us to Rasor Road for Thanksgiving week. My uncle started this tradition with his wife and convinced my father to see what it was all about long before any of us kids were around. It was a secluded place to blow off steam and let my dad and uncle compete for whose sand rail was faster and louder and to venture out in to the open desert without having to worry about the constant troubles in life. The tradition grew throughout my father's side of the family and we ended up with 7 trailers, campers, and RVs in our camp. As kids started coming into the picture so did all the toys. There were more motorcycles, quads, and sand rails in our family than actual people. Every year all of us looked forward to spending the week out at Rasor Road with our entire family. It didn't take long to realize that once a year was not enough for The Larr Family. We starting going out for New Year's, Easter, and any other holiday our parents could get a way for work. I always thought the main reason we would go camping was to make all the kids happy, let us ride our quads, and spend time with our family but as I've grown up I've realized it was so much more than that. Rasor Road is an escape from reality for my parents and family. It is a severance from the real world and all of its stress and anxiety that came with it. As the kids started to grow up and exercised their need for separation from their family, Rasor Road was the one place that would bring us back together. It became a ritual in our family that once a family member started dating someone and wanted to take the next step in that relationship they would bring them to Rasor Road for Thanksgiving. If they survived and enjoyed it, we knew they were a keeper. It wasn't long until the "kids" grew up and starting buying out own trailers and toys and grew the camp with significant others and friends. Somehow our family was a "bad influence" on friends because once they have been to Rasor Road with the Larr Family the next thanksgiving they would end up joining us with their own set of toys and trailers. We would show them the fun, relaxing, and unforgettable experience that is Rasor Road and our friends could not resist it. Not only have our friends become Rasor Road addicts but the past 3 years my brother has had the opportunity to carry on the family tradition with his two kids. Having three

5-1

generations of Larr's camped at Rasor Road for Thanksgiving was an cherished moment in my parent's and our family's lives. I have been looking forward to that day when I too get to teach my son/daughter how to ride a quad and to show them all the places their grandparents took their mom when I was their age. The majority of my family memories are at Rasor Road. The reality is, it was such a known fact that Rasor Road is my favorite place to spend any free time and vacation that in 2010 my long time boyfriend proposed to me on the top of one of the highest sand dunes us Rasor Road veterans call "The Top of the World". My entire family and friends were there to share in the excitement and celebration.

You can probably hear the passion I have for this place and I can guarantee I am not the only one that shares this deep passion for Rasor Road. Many families, like mine, have significant memories that were made at Rasor Road and all of us will fight to save it to continue making those memories. You can argue there are many other places for all of us to camp and vacation but I can tell you none of those places can even compare to Rasor Road. Rasor Road is not just a place on the map or an empty desert to build god knows what on. It is past, present, and future memories for my family and so many others. So please, discontinue the plans of Solar Soda Mountain at Rasor Road so my family and many others can continue to enjoy the beauty and uniqueness of Rasor Road in peace with their loved ones. Thank you for your time and consideration.

5-1 cont.

Courtney Larr

Jan 4, 2014

Bureau of Land Management
Rasor Road proposed solar project

BBM

My name is Dedra Smith, my family has been going to Rasor Road riding area since 2006. I am writing in response to the proposed solar project for Rasor Road.

We have enjoyed many family get together at Rasor, we enjoy the fact the it is like one big riding family out there. While we are there our children can play and have a great time and we don't have to worry about them getting ran over by riders not paying attention unlike other riding areas. Rasor has become like home for our family, we have had many happy memories out there. Our family takes great pride in the area, we leave it cleaner than it was when we get the each time there. My husband built a drag to help maintain the road so the road is a little easier to take everyone's trailer down, he trys to drag the road each time we are there. Unlike other riding areas Rasor has not turned commercialized, it is a place we can take our families to and spend quality time together.

In closing we just ask that you would remember that Rasor Road is a large riding family home. Please don't jeopardize our access to it.

6-1

Concerned citizen

Dedra Smith
3011 Slaterfield Ave
Bakersfield, California. 93313

Garydedra@sbcglobal.net
661-444-3155

Keith

To: Keith@BLMVolunteers.com
Subject: FW: Rasor road solar project

To: Keith
Subject: Re: Rasor road solar project

To BLM and Soda Mountain Solar Company:

We are writing this letter regarding the proposed solar plant around Rasor road OHV area. We believe that solar power is an excellent idea and that this project that you are proposing will benefit the area and the state. However, with that said our concerns are the costs that deserving patrons of Rasor road OHV will have to pay due to the placement of this project.

We have been camping at Rasor road for 4 1/2 years. We absolutely love the area, we attend the clean ups to do our part to keep the area as clean as we possibly can! And travel 3 1/2-4 hours just to enjoy the Rasor road riding and camping! 7-1

Our problems with your proposed project is the "new road". The road that exists is perfectly fine with us! There must be a good solid road for access into and out of the OHV area for campers and emergency personnel. We request that you modify your plans to be able to keep the road that exists the way that it is now for everyone to be happy about this project!

It also has my attention that you will be building on both sides of the 15.. I also respectfully request that we do not loose too much riding area due to this project! Good riding area is very hard to come by anymore and Rasor road as it is right now is our favorite spot! 7-2

We hope that you take our concerns to heart and that there is a happy compromise between the OHV patrons and your proposed solar project. Thank you very much for your consideration on this matter!

Sincerely,

Eric & Kelli Reed

Keith

From: Jon Hall <bgjnhall@yahoo.com>
Sent: Saturday, January 04, 2014 9:23 AM
To: Keith@BLMVolunteers.com
Subject: Rasor Road

To whom it may concern -

My name is Jon Hall and my wife is Valerie Hall. While I have been an OHV rider for many years, my wife and I have only been introduced to Rasor Road since 2011. We have fallen in love with it. We travel over 300 miles to enjoy Rasor Road. While we understand how important renewable energy is to the U.S. We feel that there are other areas this can be placed. There are few areas that are open to OHV usage. Rasor Road is vital to the OHV community. As a part of the BLM Rasor Road clean up group, we have witnessed two things. First, is how many people love Rasor Road. The amount of people that give up a well deserved day off to spend keeping Rasor Road clean is amazing. Second, is just how clean this area stays. We traveled over ten miles cleaning up the area and very little trash came from the main camping area. This shows how much the OHV community cares about the areas that we have. Most of the trash cleanup was needed along the highway. This is not from the OHV riders but from the uncaring public. As a community we are asking to move this solar farm to a non-riding area. Please don't take away our riding area that we love. 8-1

Sincerely
Jonathan L. Hall
Email:bgjnhall@yahoo.com

Sent from my iPhone

State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
407 West Line Street
Bishop, California 93514
www.dfg.ca.gov

EDMUND G. BROWN, Jr. *Governor*
CHARLTON H. BONHAM, *Director*

January 6, 2014

Mr. Chris Conner
San Bernardino County Land Use Services Department
385 N. Arrowhead Avenue
San Bernardino, Ca 92415-0182

Subject: Soda Mountain Solar Project, Draft Environmental Impact Statement /Environmental Impact Report, State Clearinghouse Number# 2012101075

Dear Mr. Conner:

The California Department of Fish and Wildlife (Department) has reviewed the Draft Environmental Impact Statement (DEIS)/Environmental Impact Report (DEIR) prepared by the Bureau of Land Management (BLM) and the County of San Bernardino (Lead Agency) for the Soda Mountain Solar Project, hereinafter referred to as the Project. The Project, proposed by Soda Mountain Solar, LLC, is for the construction, operation, maintenance, and decommissioning of approximately 2,455.57-acres, 358-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation plant, interconnection (gen-tie) transmission line, operations and maintenance of facilities, and site access roads. The Project is located in central San Bernardino County, California, entirely on BLM-administered lands, approximately six miles southwest of the town of Baker, California.

The Department is providing comments on the Draft EIS/EIR as the State agency which has the statutory and common law responsibilities with regard to fish and wildlife resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by the Department (Fish and Game Code (FGC) §711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish and Game Code §1802). The Department's fish and wildlife management functions are implemented through its administration and enforcement of the Fish and Game Code (FGC §702). The Department is a trustee agency for fish and wildlife under the California Environmental Quality Act (see CEQA Guidelines, Title 14 California Code of Regulations (CCR) §15386(a)). The Department is providing these comments in furtherance of these statutory responsibilities, as well as its common law role as trustee for the public's fish and wildlife.

9-1

Regulatory Authority

Incidental Take Permit: The Department has regulatory authority over projects that could result in "take" of any species listed by the State as threatened or endangered,

9-2

pursuant to the California Endangered Species Act (CESA). If a project could result in take of any species listed as threatened or endangered under CESA, an Incidental Take Permit (ITP) pursuant to Fish and Game code Section 2081(b) for the project would be warranted. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (sections 21001{c}, 21083, Guidelines sections 15380,15064,15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports Statements of Overriding Consideration (SOC). The CEQA Lead Agency's SOC does not eliminate the Project proponent's obligation to comply with CESA.

9-2 cont.

9-3

Fully Protect Species: The Department has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited and the Department cannot authorize their take for development. The Department recommends the DEIS/DEIR evaluate and address Project related impacts to fully protected species and include appropriate species specific avoidance measures.

9-4

Bird Protection: The Department has jurisdiction over actions that may result in the disturbance or destruction of active nests sites or the take of birds. Sections of the Fish and Game Code that protect birds, their eggs, and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory non-game bird).

9-5

General Comments

The Project is in the range of the desert tortoise (*Gopherus aggassizzi*, DT), which is listed as threatened under the CESA; the golden eagle (*Aquila chrysaetos*, GE) and the American peregrine falcon (*Falco peregrinus anatum*, APF) both of which are Fully Protected Species under FGC Section 3511; Nelson's bighorn sheep (*Ovis canadensis nelsoni*, BHS), which is a Fully Protected Species under FGC Section 4700; the burrowing owl (*Athene cunicularia,* BUOW), which is a Species of Special Concern and protected under FGC Section 3503.5; the prairie falcon (*Falco mexicanus*, PF), loggerhead shrike (*Lanius ludovicianus*, LHS), Le Conte's thrasher (*Toxostoma lecontei*, LCT), American badger (*Taxidea taxus*, AB), and Mojave fringe-toed lizard (Uma scoparia, MFTL), all of which are listed as a State Species of Special Concern; and the desert kit fox (*Vulpes macrotis arsipus,* DKF), DKF is addressed in Title 14 of the California Code of Regulations: §460. "Fisher, marten, river otter, desert kit fox and red fox may not be taken at any time." DKF is also addressed under the FGC Section: §4000 "Fur-bearing mammals enumerated. The following are fur-bearing mammals: pine marten, fisher, mink, river otter, gray fox, red fox, kit fox, raccoon, beaver, badger, and muskrat."

9-6

The DEIS/DEIR states that a DT Translocation Plan, Burrowing Owl Mitigation and Monitoring Plan, and Bird and Bat Conservation Strategy shall be developed. The above mentioned plans along with DKF Mitigation and Monitoring Plan, Raven Control

9-7

Plan, Cacti Salvage Plan, and an Eagle Conservation Plan need to be included as attachments to the DEIS/DEIR so they can be reviewed in order to determine the environmental impacts of the Project. 9-7 cont.

The DEIS/DEIR describes the Project right-of-way as being 4,179 acres in size. Alternative A (Proposed Action) has 2,455.57 acres of vegetation disturbance, Alternative B will remove 1,811.9 acres of vegetation, Alternative C will remove 2,021.60 acres of vegetation, and Alternative C will remove 1,868.96 acres of vegetation. The Project right-of-way should reflect the acres of vegetation disturbance. 9-8

The Project is located south of the Soda Mountains and north of the Rasor Road Off-Highway Vehicle Area and Mojave National Preserve. The effects of the Project combined with those of past and reasonably foreseeable future projects as well as natural constraints, appear to potentially impair or sever connectivity for DT and BHS. The Department recommends the Lead Agency include additional disclosure and analyses on connectivity issues the Project may impose on DT and BHS. 9-9

Desert Tortoise

The DEIS/DEIR uses the term "clearance survey" for activities associated with the DT. We infer from this that DT would be moved if found on site. Movement of DT would entail take under CESA. As such, the Developer would be warranted to apply for and obtain an ITP from the Department before moving or otherwise handling DT. 9-10

The Road and Fence Plan (Plan) states that vehicles and equipment will access the buried conductor lines on the north side of I-15 via Opah Ditch Mine Road or through overland routes for maintenance of the conductor lines located outside of the array blocks. The Plan further states that accessing buried conductor cable southeast of I-15 for maintenance activities will be from the main access road, internal access roads, or overland routes. Figure 2-1, 2-5, 2-6, and 2-7 in the DEIS/DEIR shows Inter Array Access Roads, Collector Corridors, and Flood Protection Berms as having temporary DT exclusion fence installed around the outer perimeter of the construction work areas including the outer perimeter of roadways, substation, and collector lines routs to prevent DT from entering the areas of active construction. The Plan states that the solar array fields will be completely fenced with permanent combined DT and security fencing and that all temporary DT exclusion fence between the array fields will be removed at the completion of construction. The Department wants to remind the Lead Agency that all project related activities within the ROW that occur outside the maintained permanent DT exclusion fence will need to be monitored for the life of the project by a designated biologist. 9-11

The DEIS/DEIR Protocol DT Survey estimate of abundance (with confidence intervals) is based on the sample of live DT observed during site surveys that are great then 160 millimeter (mm) midline carapace length (MCL). The Department includes *all* DT observed above ground regardless of size to estimate DT numbers within a project area (which includes the linear components of a project, such as perimeter fence, roads, and 9-12

transmission lines). The Department recommends revising the DT estimate of abundance using *all* live DT observed and updating the DEIS/DIER accordingly

9-12 cont.

Golden Eagle, American Peregrine Falcon, Prairie Falcon, Le Conte's Thrasher, and American Badger

The DEIS/DEIR states that BHS and GE surveys were performed concurrently in March and May 2011. It is not clear if the surveys for BHS were done by the same people at the same time as the GE surveys. The Department does not support the same people conducting surveys concurrently for multiple species because it increases the chance that a species can be overlooked.

9-13

If the Project activities cannot feasibly avoid the breeding bird season, the Department recommends the Lead Agency require the Developer to comply with statute regarding nesting birds.

9-14

Nelson's Bighorn Sheep

The Department emphasizes the importance of re-establishing and maintaining connectivity between the South Soda Mountains and North Soda Mountains in terms of demographic and genetic benefits, and the importance of both to maintaining metapopulation function. The Department also noted the early recognition of the importance of preventing additional restrictions to movement in the vicinity of these ranges.[1] More than 40 years ago, and in comments specific to the Soda Mountains, it was recognized that consideration should be given to allowing for sheep movements and that construction of any facilities that would further restrict opportunities for movement would be detrimental to the persistence of bighorn sheep.[2]

Epps and coauthors used a sophisticated modeling exercise to evaluate the importance of the area in question relative to connectivity between areas north (west) and south (east) of Interstate Highway 15.[3] The network analysis reported by those authors indicated that, "... the North-South Soda Mountains connection is the most important restorable corridor for long-term demographic potential ... across the entire southeastern Mojave Desert of California...".[4] The authors then concluded that the proposed Soda Mountains Solar Project, "... has the potential to interfere with, if not

9-15

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[1] Bleich, V.C. 2012. Comments regarding the South Soda Mountains Solar Project as related to the Desert Renewable Energy Conservation Plan. Unpublished memo to Ms. R. Abella, California Department of Fish and Game, dated 26 August.

[2] Weaver, R. A., and J. L. Mensch. 1970. Bighorn sheep in northwestern San Bernardino and southwestern Inyo counties. Wildlife Management Administrative Report 70-3. California Department of Fish and Game, Sacramento, USA.

[3] Epps, C.W., J.D. Wehausen, R.J. Monello, and T.G. Creech. 2013. Potential impacts of proposed solar energy development near the South Soda Mountains on desert bighorn sheep connectivity. Unpublished report. Oregon State University, Corvallis, USA.

[4] Epps, C. W., J. D. Wehausen, R. J. Monello, and T. G. Creech. 2013. Potential impacts of proposed solar energy development near the South Soda Mountains on desert bighorn sheep connectivity. Unpublished report. Oregon State University, Corvallis, USA.

preclude, future corridor restoration efforts in this location, including the building of one or more bridges for sheep..." and that, "Given the intensity of proposed development in these areas and associated fencing, it is very unlikely that bighorn sheep would be able to move across any developed area."

The potential value of establishing water sources in the North Soda Mountains in an effort to support a population of bighorn sheep in that range was first emphasized in the early 1970s, and the value of doing so to help restore connectivity between the South Soda Mountains and ranges to the north have been emphasized in the draft desert bighorn sheep management plan.[5] [6] With that in mind, the potential value of existing underpasses along I-15 must not be diminished, despite speculation that the probability of their use by bighorn sheep is low because most of the existing culverts are <26.3 feet in width. [7] [8]

9-15 cont.

The Departments review of available information, combined with the successes of extending the range of bighorn sheep through the development of additional water sources, leads to conclusion that development of a single water source, one on each side of I-15, is inadequate.[9] Department concludes that multiple water sources are necessary in an effort to encourage use by bighorn sheep on a year-round basis in the south end of the North Soda Mountains and to encourage use in the vicinity of the Department recommended wildlife bridges (Attachment 1) and existing culverts, which could increase the probability of movement by bighorn sheep.[10] [11]

9-16

The Department concludes and recommends the construction and maintenance of six water developments in the vicinity of the project site has far greater potential to enhance the probability of movement by bighorn sheep than will two water developments

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[5] Weaver, R. A., and J. L. Mensch. 1970. Bighorn sheep in northwestern San Bernardino and southwestern Inyo counties. Wildlife Management Administrative Report 70-3. California Department of Fish and Game, Sacramento, USA.

[6] California Department of Fish and Wildlife. 2012. A conservation plan for desert bighorn sheep in California. Draft of February 2012. California Department of Fish and Wildlife, Sacramento, USA.

[7] Panorama Environmental, Inc. 2013. Bighorn sheep survey results and analysis, Soda Mountain Solar Project, BLM Case No. CACA-49584. Unpublished report. Panorama Environmental, Inc., San Francisco, California, USA.

[8] Penrod, K., C. R. Cabanero, P. Beier, C. Luke, W. Spencer, E. Rubin, and C. Paulman. 2008. A linkage design for the Joshua Tree-Twentynine Palms Connection. South Coast Wildlands Project. Available at: http://www.scwildlands.org/reports/Default.aspx#17

[9] Panorama Environmental, Inc. 2013. Bighorn sheep survey results and analysis, Soda Mountain Solar Project, BLM Case No. CACA-49584. Unpublished report. Panorama Environmental, Inc., San Francisco, California, USA.

[10] Weaver, R. A., and J. L. Mensch. 1970. Bighorn sheep in northwestern San Bernardino and southwestern Inyo counties. Wildlife Management Administrative Report 70-3. California Department of Fish and Game, Sacramento, USA.

[11] California Department of Fish and Wildlife. 2012. A conservation plan for desert bighorn sheep in California. Draft of February 2012. California Department of Fish and Wildlife, Sacramento, USA.

designed to, "Encourage bighorn sheep to cross I-15 in a safe area."[12] The Department suggests these water developments be placed as follows, with the actual locations yet to be determined: (1) one in the north end of the North Soda Mountains, to provide this resource to any bighorn sheep that move southward to the North Soda Mountains from the Avawatz Mountains; (2) one further south, also in the North Soda Mountains, to provide water as animals expand their range in a southerly direction in the North Soda Mountains, in an effort to "stairstep" the population southward, as was done in the Sheephole Mountains;[13] (3) two water sources near, or at, selected culverts or wildlife bridges on the north side of I-15, to encourage animals to remain in the vicinity of those potential passageways (i.e., they would "bait" sheep to those sites and encourage use in those areas by providing a resource of value to the sheep); and, (4) two additional water developments at the south end of each of the wildlife bridges or culverts described in (3), above, again in an effort to "bait" sheep from the north end of the South Soda Mountains to the opening of the chosen culvert(s) or underpass(es).

9-16 cont.

It is extremely important that opportunities for bighorn sheep to move through the existing underpasses not be hindered. "The development of a solar power generation project between the North and South Soda Mountains would likely preclude such use of some of these underpasses."[14]

The Department has identified a wildlife bridge location (Attachment 1) that the project would preclude the sheep access to. The project as proposed also reduces sheep access to foraging habitat and escape terrain. To reduce impacts to bighorn sheep the Department recommends placing the project perimeter fence 0.25 miles from the 10% slope (Attachment 1) and leaving Rasor Road in its existing location.

The DEIS/DEIR states that the Alternative A (Proposed Action) would have a significant and unavoidable impact on BHS and Alternatives B, C, and D may retain portions of the BHS movement corridor. As stated previously BHS are a fully protected species and the Department cannot authorize their take. The Department recommends the Lead Agency require the applicant implement the above mitigation measures. The installation of the wildlife bridges in conjunction with the installation of permanent water sources, placing the project perimeter fence .25 miles from the 10% slope and leaving Rasor Road in its existing location would eliminate direct, indirect, cumulative impacts of the project and provide connectivity thus minimizing the loss of genetic diversity and conserve metapopulation function through greater stability, population size and increased gene flow.

9-17

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[12] Panorama Environmental, Inc. 2013. Bighorn sheep survey results and analysis, Soda Mountain Solar Project, BLM Case No. CACA-49584. Unpublished report. Panorama Environmental, Inc., San Francisco, California, USA.

[13] Bleich, V. C., M. C. Nicholson, A. T. Lombard, and P. V. August. 1992. Preliminary tests of mountain sheep habitat models using a geographic information system. Proceedings of the Biennial Symposium of the Northern Wild Sheep and Goat Council 8:256–263.

[14] Epps, C. W., J. D. Wehausen, R. J. Monello, and T. G. Creech. 2013. Potential impacts of proposed solar energy development near the South Soda Mountains on desert bighorn sheep connectivity. Unpublished report. Oregon State University, Corvallis, USA.

Burrowing Owl

The DEIS/DEIR states that impacts to BUOW shall be mitigated at a 1:1 ratio through a combination of off-site habitat compensation and/or off-site restoration of disturbed habitat capable of supporting this species. Mitigation recommendations for impacts to BUOW habitat are provided in the Department's 2012 Staff Report on Burrowing Owl Mitigation. The Department recommends the Lead Agency update the DEIS/DEIR to reflect these recommendations including avoidance, burrow exclusion and closure, translocation, and mitigation alternatives. The Department is available for further consultation on these issues as needed. 9-18

Desert Kit Fox

The Department recommends the Lead Agency prepare a DKF Mitigation and Monitoring Plan and submit it to the Department for review and approval. 9-19

Mojave Fringe-toed Lizard

Source sand and sand corridors are necessary for the long-term survivorship of an Aeolian sand specialist like the MFTL. Every effort should be made to ensure that sand transport continues to the dunes just outside the project and to the loose-sandy, Aeolian deposits in drainages. 9-20

Plants

Mesquite, Smoke Tree, and cat claw acacia are plants that occur as part of desert wash habitat. The Departments mitigation ratio for desert wash is typically 3:1 for each plant impacted with a diameter of 2" or greater. 9-21

Streambed Alteration Notification

Notification of a Streambed Alteration pursuant to Fish and Game Code §1600 *et. seq.* may be warranted for the Project. The Department has direct authority under Fish and Game Code §1600 *et. seq.* in regard to any proposed activity that would divert, obstruct, or affect the natural flow or change the bed, channel, or bank of any waterway. Departmental jurisdiction under §1600 *et. seq.* may apply to all lands within the 100-year floodplain. Streams include, but are not limited to, intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams and watercourses with subsurface flow. Early consultation with the Department is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources. 9-22

The Department, as a responsible agency under CEQA, may consider the local jurisdiction's (Lead Agency's) EIS/EIR for the Project. However, if the Draft EIS/EIR does not fully identify potential impacts to lakes, streams and associated resources (including, but not limited to, riparian and alluvial fan sage scrub habitat) and thus does

not provide adequate avoidance, mitigation, monitoring and reporting commitments, additional CEQA documentation will be required prior to execution (signing) of the Streambed Alteration Agreement. The Department recommends to avoid delays or repetition of the CEQA process, potential impacts to a lake or stream, as well as avoidance and mitigation measures be discussed within this CEQA document.

9-22 cont.

In order for the Department to adequately assist the Lead Agency in determining the potential impacts of the Project, please forward the requested information outlined in this letter to Wendy Campbell, Environmental Scientist, at the Department of Fish and Wildlife Inland Deserts Region Bishop Field Office, 407 West Line Street, Suite 1, Bishop, CA 93514. Questions regarding this letter and further coordination on these issues should be directed to Ms. Campbell, at (760) 258-6921 or by email at WCampbell@wildlife.ca.gov.

9-23

Sincerely,

Heidi Sickler

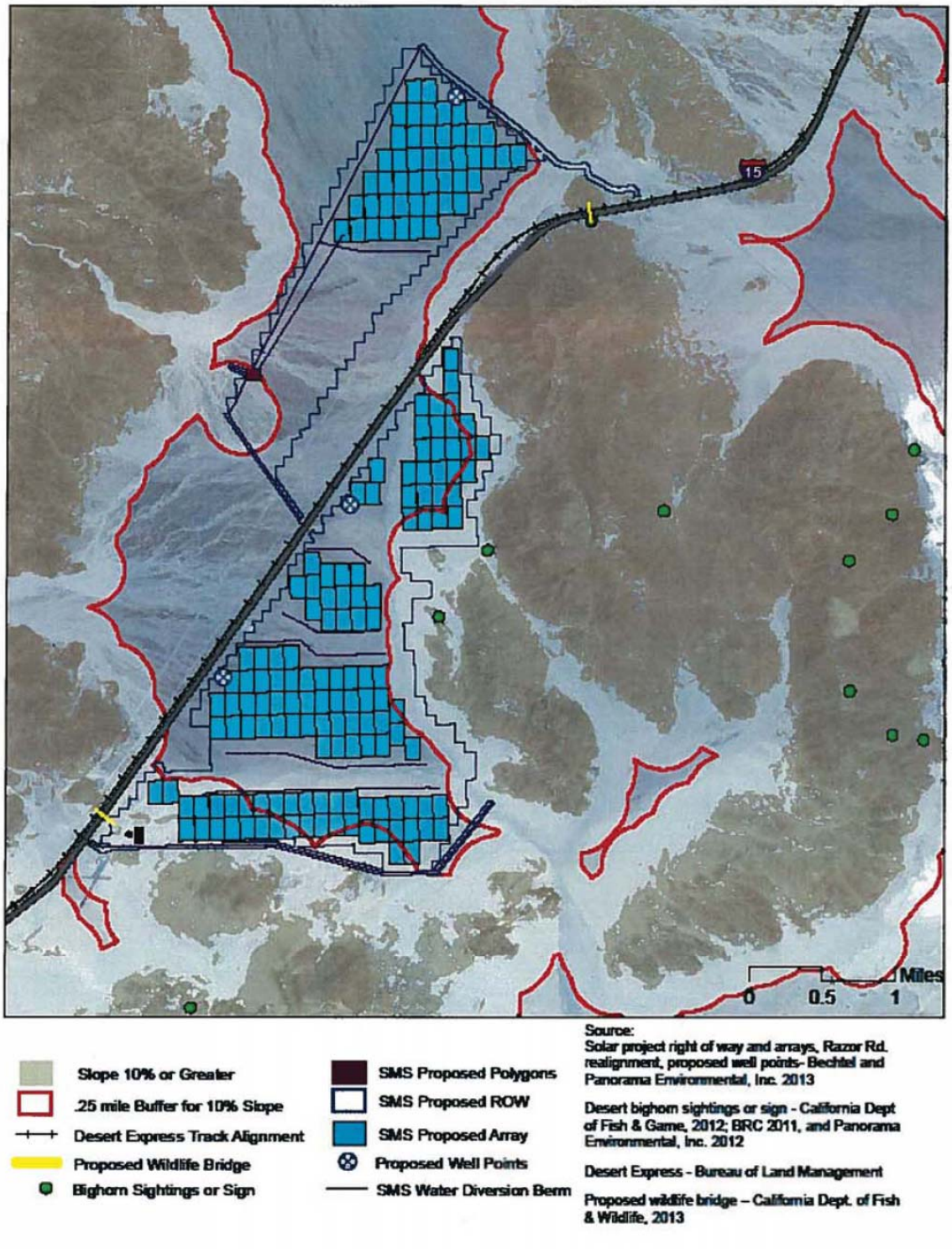
Heidi A. Sickler
Senior Environmental Scientist

Attachment 1 – Project Map

cc: Wendy Campbell
Chron

Mr. Chris Conner
Soda Mountain Solar DEIS/DEIR
January 6, 2014

ATTACHMENT 1 – Project Map



9-24

State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Wildlife Branch
1812 9th Street
Sacramento, CA 95811
www.dfg.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director

March 3, 2014

Mr. Chris Conner
San Bernardino County Land Use Services Department
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0182

Subject: Soda Mountain Solar Project, Draft Environmental Impact Statement /Environmental Impact Report, State Clearinghouse Number# 2012101075

Dear Mr. Conner:

The California Department of Fish and Wildlife (Department) has reviewed the Draft Environmental Impact Statement (DEIS)/Environmental Impact Report (DEIR) prepared by the Bureau of Land Management (BLM) and the County of San Bernardino (Lead Agency) for the Soda Mountain Solar Project (Project). A comment letter, dated January 3, 2014 was submitted and can be found attached.

In addition to comments provided by the Department in the January 3, 2014 letter, we want to update the Lead Agency on new and developing information regarding bighorn sheep in the southern Soda Mountains.

9-25

In November 2014, in response to a disease outbreak, the Department and partners captured and collared BHS in several desert mountain ranges. Four adult female bighorn sheep were affixed with VHF and GPS collars in the southern Soda Mountains. The GPS collars will monitor daily movements of the ewes and their use of the available habitat. While this data can only be collected via recapture or remote download, remote download field observations of the marked sheep have revealed their use of the range near Rasor Road, a great distance from the area where they were captured on the main mass of the southern Soda Mountains, suggesting bighorn use the low elevation land, potentially in the project scope, to move between rocky slopes. The Department recommends that consideration be given to allow sheep movements to continue to move freely as further restricting opportunities for movement would be detrimental to the persistence of bighorn sheep. To minimize impacts to bighorn sheep, again, the Department recommends placing the project perimeter fence 0.25 miles from the 10% slope and leaving Rasor Road in its existing location.

The Department recommends the Lead Agency require the applicant implement the above mitigation measures, as well as those previously recommended in the attached comment letter. The measures would eliminate direct, indirect, cumulative impacts of the project and minimize loss of connectivity thus minimizing the loss of genetic diversity and conserve metapopulation function through greater stability, population size and increased gene flow.

9-26

Questions regarding this letter or coordination on this issue should be directed to Ms. Regina Abella, Environmental Scientist, at the Department of Fish and Wildlife, 1812 9th Street, Sacramento, CA 95811, by email Regina.Abella@wildlife.ca.gov , or by phone at (916) 445-3728.

Sincerely,

Eric Loft, Ph.D, Chief
Wildlife Branch

Keith

From: Robin Kelley <rkelley1@caesarspalace.com>
Sent: Monday, January 06, 2014 11:21 AM
To: Keith@BLMVolunteers.com
Cc: lvlilirishman@gmail.com
Subject: "Leaving Rasor Road alone "

My Family & Friends have been going to Rasor Road for a long time, It is one of the best places to go Camping,Riding,or Hiking close to Vegas, Please leave as it is !!! 10-1

Thank You ,

Robin Kelley
Parts Room
Caesars Palace
3570 Las Vegas Blvd. South
Las Vegas, NV 89109
Direct: 702-731-7023) **Fax:** (702-731-7157)
Email: rkelley1@caesars.com

Keith

From: Keith <Keith@BLMVolunteers.com>
Sent: Tuesday, January 07, 2014 12:15 PM
To: Keith@BLMVolunteers.com
Subject: Regarding the Soda Mtn Solar Project

Soda Mountain Solar Project:
01-07-2014

Hello, My name is Keith Daigneault and here are my thoughts about the proposed solar project at Rasor Road. I am very much involved with this BLM OHV area and hold yearly cleanups out there along with owning a 40 acres private property lot in the middle of the OHV area along with being a BLM Volunteer that does regular patrolling of this area. I work out of the Barstow field office under Katrina Symons. I am also a General Building Contractor for over 30 years, I own Orange County Construction.

ACCESS: The proposal to realign the road is the worst idea of all. It will get washed out when it rains hard out there and people won't be able to access the area and the people that are back there can't get out. This is the only access to the riding area. When it rains you can't go through the Mojave road due to you will sink your vehicle. Emergency vehicles will not be able to access the area either. 11-1

ROAD MAINTAINNENCE: What is your plan to maintain the new road? We will need a quick response team and tractor to fix and maintain this road year round. What is the road going to be made of? How wide is this new road going to be? It needs to be wide enough for opposing traffic to go buy and we have some very big motorhomes and trailers that go back there. 11-2

FLOOD CONTROL: What is your plan for flood control? It does not rain too much out there, but when it does it really floods quickly. I have been in many (about 5 major) floods in the last 30 years out there and have watched about 5-8 feet of water cut through the desert. 11-3

RASOR ROAD: The road right now, where it is acts not only as a road, but as a wash. This is where the water comes down from the hills on the north and south and meets and washes down towards the Soda Lake. This is why the road is where it is. It was not man made, it was made by nature and is compacted down by the travel of all the OHV vehicles that go to and from. This road moves yearly... sometime by a few feet and sometimes over 100 yards and more. If you build too close to it, you will have some major problems when it gets washed away. 11-4

BALANCE: What can you do for us being that we are willing to work with you? This solar installation is a huge eye-sore and not really wanted by the OHV'rs at all. Can you do something for them to help balance this out? I am sure they would like to have a water hose bib accessible 24 hours a day maybe at the end of the fence line. You could put it on a timer or something. Even if it's non-potable water. We would also like to request a 11-5

septic tank to dump in. This is not a very big request and can easily be done compared to the scope of work that is going to take place. 11-5 cont.

DUST & DIRT: I would like to have it put in writing that the OHV'rs will never be blamed on the dust accumulation on the solar panels due to you making us travel right through the solar field. I don't want legal battles or closer of the area or access due to this in the future. The dust that will collect on the panels will be from the winds out there that blow in all directions. At least several times each month the winds blow out there and the dust gets so thick that you can't see a mile. I have seen many white-outs out there every year. Sometimes the winds blows real hard out of the south in the morning and out of the north in the afternoon. The wind changes the shape of the sand dunes, fills trenches out there and cover ATV tracks all the time. 11-6

CONSTRUCTION: I understand that we could be looking at about 3 full years or more for the duration of the construction out there. I would like to know "for sure" that there would never be any reason that would block access for us to the OHV area and if this might occur or does occur we need to have a plan "B" for this. If the existing Rasor Road is not realigned and stays where it is, will this also be used for the many construction vehicles that will be coming and going every day? Will there be a backup on this road or stuck work vehicles? As I mentioned this road is nothing more than a slightly compacted "sand wash" and can be very unstable at times in many areas. We absolutely cannot be blocked from coming and/or going to our OHV area. 11-7

TRAFFIC: Rasor Road as it is right now may not be wide enough for opposing traffic of large motorhomes and large construction dump trucks, water trucks and tractor/trailers. The road has berms on both sides and will tilt oncoming vehicle towards each other and the tops of the truck and motorhomes can collide. What is the proposal for the amount of traffic that we will have? 11-8

HISTORICAL ARTIFACTS: What is your plan for the artifacts that are in the area of your construction? Each year that we hold a cleanup out there we instruct our volunteers to not pick up all the old tin cans as BLM has deemed them to be more than 50 years old and they mark a historical event and place. What is going to happen to these? 11-9

RASOR ROAD KIOSK: I have been told that your solar plant is going to extend out of the limited use area and into the OHV area, thus taking riding land away from us and I was also told that you were going to relocate our kiosk sign. Do you have a map and plan for this yet? How many acres are we losing in the OHV riding area and can we get those acres back by opening up the limited use area to the south of Basin road? If you are going to relocate the kiosk, I would like to ask for a little bit bigger concrete pad in front of it along with a concrete picnic table. Reason being is that this also serves for a cell signal stopping area as we have no cell signal out back. Many people come to the kiosk for shade and to get a signal. You could reach out and make some friends of the OHV'rs by giving back a little bit. 11-10

MAPS & PUBLIC INFO: Can we expect to have an accurate map of the construction and array area along with a critical path for the build and construction of the facility for the public? It would help the public and OHV'rs better understand what to expect and 11-11

when to expect it. I would like to request that you supply us with a smaller kiosk at the entrance of the road and keep fresh maps and info updated at the kiosk for the duration of the construction. I am able to reach the majority of the OHV'rs with my contacts, but I can't reach them all and this might save from confusion, frustration and vandalism. I will help in any way that I can. 11-11 cont.

EXCAVATION & RELOCATION: What is the plan for the thousands of yards of earth that you are excavating? Where is all this sand going? I have a suggestion that might work for some or all of it. What about building a large continues berm the entire length of the project from the northern hills to the southern hills to block and hide the solar facility from the OHV'rs and campers leaving an opening about 100 yards wide incase the road should move on us? Of course it would need to be compacted. It would be nice to keep the natural and resident earth in the same location. This would also block the view of any light sources that may be visible to the campers that don't want to see a city in the middle of their OHV area that we love so much. Any thoughts? 11-12

TOXIC WASTE: What is the plan for construction waste, concrete run off and what is the chemicals that you will be spraying or applying to the earth to stop any future growth of vegetation? Are the OHV'rs at risk of this? Will this spray be airborne during application time? What do we need to know about this subject? 11-13

SHOOTING THE SOLAR PANALS: I was asked by Laurie Hietter in the Panorama Env office a question during our two hour conversation a few months back. She asked me "Do you think the people out there will shoot our panels?" I answered her with "Do your panels get shot up at other locations?" She responded to me "Yes". I would hope that this would never happen with the great family community of OHV'rs that we have at Rasor Road. In fact, the new kiosk signs that we have out there, I helped to install them and everyone out there knows this and they have been up for two years now and I have not seen one bullet hole in them yet. The overall majority of people that frequent this area are desert loving and responsible. In fact, you can visit the main staging area and all the camp sites are clean and almost no trash anywhere. Of course we have some cowboy weekend warriors that show up from time to time and I make sure to do several camp contacts with these people to try and get them on the right path. My feeling and your best bet is to give back a little and try to make friends with these great people in this special area. We are not asking for much, nor do you need to give anything... 11-14

WIN/WIN: I would like to see this project be a win/win for all parties. I am a general building contractor and very much believe in renewable energy and I am not standing in the way of progress. But having said that, I am also a huge participant in the OHV community and I am not standing for congress, Feinstein or anyone else that wants to take more public land away from us. Congress has corralled the OHV riders into small chunks of land, then watch us ride all over the place and then they say "Look at what they are doing to the land". We can't afford to lose any more land that is designated to "full use". 11-15

IN CLOSING: I can't speak for everyone, but I know most of them. I have a huge influence in the OHV community at Rasor Road. I want to ask you if there is anything that I can do to help both sides get along, understand and respect each other and I 11-16

would like nothing more than to see this project and the OHV community shake hands at the end of the day. 11-16 cont.

Comment Letter 11

Alexandra Kostalas

Subject: FW: Soda Solar project

---------- Forwarded message ----------
From: **Keith** <Keith@blmvolunteers.com>
Date: Sat, Aug 31, 2013 at 9:40 PM
Subject: Soda Solar project
To: Sodamtnsolar@blm.gov

Could you please add me to your email list and keep me in the loop on all phases and public meetings for this project? Thank you very much.

Thank you very much,

Keith Daigneault

BLM Volunteer 68V55

Motorized Volunteer Coordinator

Barstow Field Office

Cell: (714) 231-9773 - Fax: (714) 362-9514

www.BLMVolunteers.com

Comment Letter 12

Alexandra Kostalas

From: Childers, Jeffery <jchilders@blm.gov>
Sent: Tuesday, January 07, 2014 4:03 PM
To: Alexandra Kostalas; Michael Manka; Janna Scott; Soda Mountain Project EIS-EIR
Subject: Fwd: Writing to oppose proposed Soda Mountain solar Project

FYI.

Jeffery K. Childers
Project Manager
RECO California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553
Cell: 951-807-6737

---------- Forwarded message ----------
From: **Richard Fee** <rnfee@yahoo.com>
Date: Tue, Jan 7, 2014 at 3:54 PM
Subject: Writing to oppose proposed Soda Mountain solar Project
To: jchilders@blm.gov

Dear Mr. Childers,

I am writing to express opposition to the the proposed Soda Mountain Solar Project. 12-1

The proposal calls for an inappropriately sited project and threatens the Mojave National Preserve, hard=pressed and stressed bighorn sheep migration corridors, desert tortoise habitat, the endangered tui chub pup fish, and scenic view-sheds.

There is beauty in the desert, and this area in particular.

I urge rejection of this proposal.

Thank you,

Richard Fee
7811 S Kachina Drive
Tempe, AZ 85284

Comment Letter 13

MUSEUMVICTORIA

Jeffery Childers,
Soda Mountain Solar Project Manager,
22835 Calle San Juan De Los Lagos,
Moreno Valley, CA 92553

Cc: Edythe Seehafer, James Shearer, Mickey Quillman

7 January 2014

Re: Established access to Soda Mountains for scientific research.

Dear Mr. Childers,

In regard to the proposed Soda Mountains Solar Project, I would urge you to please maintain existing established access to all mines and mineral localities located in the Soda Mountains north and south of Interstate Highway 15.

The Soda Mountains contain a very unique mineralogical occurrence for BLM lands west of the Rocky Mountains. The Blue Bell Mine is a unique mineral locality which is not only of significance in California, but also has worldwide significance. Over the past few years I have along with other mineralogists in California, discovered five mineral species that are the world's first records: plumbophyllite, fluorphosphohedyphane, reynoldsite, bluebellite, and zzyzxite. The latter two minerals immortalising the mine and the Zzyzx area, respectively. Additional new mineral species that contribute to worldwide mineralogical knowledge occur at this mine and in adjacent mineral deposits. The Blue Bell mine as well as the nearby Aga mine on Otto Mountain are currently part of a large research project funded in Australia, which is researching the origin of the tellurium minerals and looking at their environmental impact. 13-1

Thank you for maintaining access to important geologic research areas within the Mojave Desert.

Sincerely,

Stuart Mills

Senior Curator
Geosciences
Museum Victoria
GPO Box 666,
Melbourne 3001
Australia

GPO Box 666 Melbourne VIC 3001 Australia
Telephone +61 3 8341 7777
Museum Victoria ABN 63 640 679 155
museumvictoria.com.au

Victoria
The Place To Be

Comment Letter 14

Mineral Sciences Department

Natural History Museum
of Los Angeles County

900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.3328
fax 213.749.4107
www.nhm.org

January 8, 2014

Jeffery Childers
Soda Mountain Solar Project Manager
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

Dear Mr. Childers,

I am writing to comment on the proposed Soda Mountains Solar Project, particularly with respect to the impact it may have on future vehicular access to the Soda Mountains.

It appears from the map of the project on the BLM website that public road access to the Soda Mountains will not be impacted; however, appearances can be deceptive. For that reason, I want to lend my voice to those of others who are urging you to take whatever steps are necessary to maintain continued public access to the area. I especially want to encourage you to avoid impact to Zzyzx Road where it skirts the northern edge of the project.

The Soda Mountains area is of great scientific interest specifically with respect to ore deposits that have yielded mineral species of significant scientific. Along with several collaborators, I have published the descriptions of three new mineral species from the Blue Bell claims in the Soda Mountains: plumbophyllite, fluorphosphohedyphane and reynoldsite, and we have two more that we expect will be approved shortly. From the deposit at Otto Mountain just north of Baker (which is apparently not impacted by this project), we have thus far described 12 other new minerals. We have continuing research interest in the minerals from these and other deposits in the Soda Mountains area.

I would also like to point out the importance of maintaining continued access to the area for mineral collectors. Mineralogical researchers rely heavily on mineral collectors who bring interesting discoveries to their attention. In fact, all of the mineral species that we have studied from the area were first brought to our attention by mineral collectors.

14-1

Sincerely,

ARKampf

Anthony R. Kampf
Curator Emeritus, Mineral Sciences

Cc: Edythe Seehafer, James Shearer, Mickey Quillman

Keith

From: Beale Dabbs <bealeestate@gmail.com>
Sent: Wednesday, January 8, 2014 8:42 AM
To: Keith@BLMVolunteers.com
Subject: Letter in opposition to the Soda Mountain Solar Project

Hello,

I am writing you regarding the Soda Mountain Solar Project. While I am a huge proponent of solar energy, I cannot support the Soda Mountain Solar Project as I feel this is a gross underestimation of the sea change that is about to occur in solar power generation and yet another folly in the desert destined to fail at our taxpayer's expense. The proper place for this sort of site is at the point of use. It should be on the rooftops of parking garages, malls, schools, public buildings, etc, not miles and miles away from the final point of use, transmitted over unnecessary power lines that require maintenance and repair and do not transmit the full amount of power generated due to line loss. The jobs it will create are only temporary during the actual construction. After that, it should require only a handful of low paying maintenance jobs to keep it up and running. A gas station supports the same amount of jobs without the desecration of public land. 15-1 15-2 15-3

This project makes no sense, unless of course, what you are really approving is not about green energy and is actually a silent corporate subsidy that is in actuality a last ditch effort to hold on to the reins of centralized power generation. It is inevitable that the decentralization of power generation will soon occur as solar panels become a standard household system, no different than indoor plumbing or gas. Why should we spend our taxpayer's money and destroy virgin desert wilderness to build a project that is obsolescent from the very start? 15-4

I strongly encourage you to drop this project.

Thank you
Beale Dabbs
Home owner in Landers, CA
TNG Real Estate ConsultantsLicense #01903384(714) 514-5858 **Phone** - (714) 449-0285 **Fax**
www.BealeEstate.com - www.Jackio.com

Public Comment Card

Soda Mountain Solar Project

Commentor Name: Stephanie Dubois Date: 1/8/14

Address: Mojave National Preserve
2701 Barstow Rd
Barstow CA 92342

Comment:

Please identify Mojave National Preserve on the project maps & documents. 16-1

Thank you.

Please indicate whether you would like to receive a copy of the Proposed PA/Final EIS/EIR and the format you would prefer:

☐ Compact Disk (CD) ☐ Hardcopy ☐ Do not send me a copy

Comment Letter 16

United States Department of the Interior

NATIONAL PARK SERVICE
Mojave National Preserve
2701 Barstow Road
Barstow, California 92311

IN REPLY REFER TO:
1.A.2 Permanent (Formerly N22) (MOJA)

March 3, 2014

Memorandum

To: BLM Project Manager, Proposed Soda Mountain Solar Project
Bureau of Land Management, California Desert District

From: Stephanie R. Dubois, Superintendent, Mojave National Preserve Stephanie R Dubois

Subject: Draft Soda Mountain Solar Project Plan Amendment/Environmental Impact Statement/Environmental Impact Report CACA049584/LLCAD0800

The National Park Service (NPS) appreciates the opportunity to comment on the Draft Plan Amendment to the California Desert Conservation Area Plan, Draft Environmental Impact Statement and Environmental Impact Report (DEIS/DEIR) for the Soda Mountain Solar Project. The NPS supports renewable energy projects on public lands that are constructed and operated in an environmentally responsible manner, serve the public interest, and protect the natural and cultural resources and treasured landscapes of the American people. We have reviewed the Bureau of Land Management (BLM) document, "A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners," and we have studied our responsibilities as a cooperating agency on this project. While we recognize the differences between the NPS and BLM missions, we must also, as sister bureaus in the Department of the Interior, actively share pertinent information and expertise. 16-2

We have organized our comments on the DEIS/DEIR in accordance with our responsibilities as a cooperating agency. They identify several resource concerns presented by this project and encourage meaningful mitigation strategies to address these significant adverse impacts to the cultural and natural resources of Mojave National Preserve.

General Comments

The BLM identifies the purpose and need for this action as a response to the Applicant's application, where the Applicant has defined the needs and objectives of the Soda Mountain Solar Project (hereafter referred to as the project). The DEIS/DEIR has accurately analyzed some of the project's environmental impacts for Alternatives A through F, namely: 16-3

- Maximum daily construction-related emissions would exceed Mojave Desert Air Quality Management District (MDAQMD) thresholds. These include nitrous oxide (NOx), carbon monoxide (CO), and particulate matter less than 10 micrometers in diameter, also known as coarse dust particles (PM_{10}). Construction would generate air pollutants that could contribute to an air quality violation.
- The project would disturb 2,456 acres of vegetation and habitat for a period of at least 30 years, with full restoration requiring a much longer time frame in this arid environment.
- The project would have significant adverse impacts to the natural topography, hydrology, native plant communities, and special-status plants.

TAKE PRIDE IN AMERICA

- The project would have significant adverse direct and indirect impacts on desert tortoise and long-term impacts to desert tortoise critical habitat.
- The project would have significant substantial unavoidable impacts to special-status birds.
- The project would have significant substantial unavoidable adverse impacts on desert bighorn sheep.
- The project would cause cumulative long-term adverse impacts to, and degradation of, unique visual resources that characterize the Mojave Desert. These resources include, but are not limited to, scenic vistas, cultural landscapes, character and values of adjacent wilderness areas, and dark night skies.

16-3 cont.

The project presents numerous potentially significant adverse impacts beyond those currently identified in the DEIS/DEIR.The analysis needs to consider more completely the impacts to adjacent lands, including the cultural and natural resources of Mojave National Preserve. NPS is particularly concerned with the project's potential impacts to the hydrology, threatened and endangered species, scenic landscapes, and wilderness character. Analysis of alternatives A, B, and C should address these impacts comprehensively. These alternatives should be revisited with greater consideration of the proximity of the project site to the Preserve and the subsequent heightened risk of adverse impacts to its resources.

"Under Alternative G, the BLM would not authorize a ROW grant for the project and would amend the CDCA Plan to identify the site as unsuitable for a utility-scale solar development; and the County would not approve the Groundwater Well Permit application." NPS maintains that Alternative G thoroughly considers the long-term needs of future generations for renewable and non-renewable resources. In contrast, analyses of Alternatives A through D conclude significant levels of irreversible, unavoidable impacts to the cultural and natural resources of the project area and surrounding lands, which includes resources managed and protected by Mojave National Preserve.

16-4

The DEIS/DEIR rejected a private land alternative, in part, due to proximity to the "Mojave River wildlife linkage corridor, Superior-Cronese DWMA (USFWS-designated critical habitat for desert tortoise), [and] Afton Canyon Area of Critical Environmental Concern (ACEC)." Similarly, the proposed location of this project is immediately adjacent to Mojave National Preserve, which, as a unit of the National Park System, also contains wildlife linkage corridors between habitat islands for desert bighorn sheep (*Ovis canadensis nelsoni*) and designated critical habitat for the desert tortoise (*Gopherus agassizii mohavensis*) plus designated wilderness. It is also adjacent to the aquatic habitat of the endangered Mohave tui chub (*Siphateles bicolor mohavensis*). We ask the BLM to analyze the Soda Mountain location with the same level of prudence and scrutiny that was given the private lands alternative. Moreover, we urge the BLM to reconsider the potential for this project to be sited on other BLM lands, private lands, or other degraded lands where renewable energy projects would present fewer adverse impacts to natural and cultural resources.

16-5

Planning & Environmental Analysis

We have found several instances in the DEIS/DEIR of our previous comments being misquoted or misinterpreted. The credibility of the NEPA analysis could be compromised by this misinformation; we request revisions in the FEIS/FEIR accordingly. Specific examples include:

16-6

Page	Misquote/Misinterpretation
H.3-7 (Appendix H-3)	**DEIS/DEIR**: The DEIS/DEIR referenced our November 21, 2012, scoping comments: "NPS suggested one potential source from which Soda Springs at Zzyzx might derive significant flow is a potential preferential groundwater flow path extending from known fracture traces north and south of the Soda Springs at Zzyzx."

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Page	Misquote/Misinterpretation
	NPS Comment: The letter, which is included in Appendix B, states: "[o]ne possible flow path for this recharge is through the location of the proposed pumping, along the northerly edge of the Soda Mountains, and then along the westerly edge of Soda Dry Lake following the permeable beach and colluvial sediments at the playa margin."
H.3-27 (Appendix H-3)	**DEIS/DEIR**: "NPS suggested using the Maxey-Eakin method for estimating recharge would determine zero recharge and this should be used as the model input for the site", and in the next paragraph, "NPS's assertion that the Maxey-Eakin method should be used to estimate recharge has been questioned by other researchers."
	NPS Comment: Our original comments read, "These assumptions likely substantially overestimate the actual recharge rate for the project area… [f]or example, the Maxey-Eakin method commonly used for estimating recharge in this arid region would predict about zero recharge at this low of an elevation." We were pointing out that recharge was likely overestimated; we were not suggesting that the Maxey-Eakin method should be used.
	NPS Comment: We also suggest that the BLM evaluate published literature such as Scanlon et al. 2006, who, in a summary of groundwater recharge in arid regions, have found recharge ranges from 0.1% to 5% of precipitation. These findings suggest the DEIS/DEIR analysis should consider a scenario with a lower recharge rate.
pages 3.4-18, 3.4-29	**DEIS/DEIR**: "[F]our box culverts and two bridges were identified in the BRTR†, that occasionally may be used by sheep (Panorama Environmental, Inc, 2013a; Epps et al., 2013)."
	NPS Comment: Epps et al. (2013) correctly identify "four existing underpasses in or near the affected area and… two specific locations where overpass structures might be built." Moreover, the DEIS/DEIR does propose the installation of additional wildlife watering facilities (APM 75, page 3.4-29) under the assumption that the watering facilities would draw sheep towards the proposed crossing locations, but the DEIS/DEIR does not demonstrate a scientific justification or provide research that indicates that this option, as a mitigating measure, would be beneficial. In addition, there have been several responses that indicate a basic misunderstanding of this system. For example, BLM recently responded that: "The cause of desert bighorn sheep absence in the north Soda Mountains is largely the absence of resources that support this species. While the highway barrier is considered a contributing factor to species' absence in this area, if the area could support sheep, they likely would be there." One might have said the same about the South Soda Mountains prior to the relatively recent arrival of bighorn inhabiting this area. The bighorn in the Mojave Desert act as a true meta-population, with populations occasionally becoming extirpated while other areas are recolonized (Epps et al. 2010). These processes rely on connectivity between bighorn herds in this region, and we have specific strategies that we have proposed that will overcome the highway barrier and allow sheep to use the North Sodas. However, this will be particularly difficult or impossible if the proposed solar array is installed with the current speculative mitigation measures.

16-6 cont.

16-7

†Biological Resources Technical Report. 2013. California BLM Case No. CACA 49584.

Identification of Significant Issues

Groundwater Analysis

16-8

While we agree with several findings of significant and unavoidable impacts caused by this project, we also find the environmental analysis to be incomplete in many instances. Consumptive use of groundwater

during construction and operation in an area of limited recharge, for instance, may threaten nearby natural spring discharge. The DEIS/DEIR does not consider potential impacts to small seeps and springs along Zzyzx Road on the north end of the Soda Mountains. These surface features are frequently and heavily used by desert bighorn sheep; if drawdown from the groundwater table adversely impacts these features, desert bighorn will also be negatively affected. We reiterate here our prior comments with regard to groundwater monitoring and project impacts to the surface waters along Zzyzx Road. Piezometers would need to be specifically located for the purpose of monitoring aquifer drawdown from the groundwater pumping being proposed for the Soda Mountain Solar Project.The DEIS mentioned this wate-monitoring technique in Mitigation Measures 3.19-3 and 3.19-4, largely due to the San Bernardino County Groundwater Ordinance No. 3872 and Memorandum of Understanding with BLM. It also, in a proposed mitigation, delegated San Bernardino County and the BLM to determine project impacts to other water resources, such as Soda Spring, with no reference to the land owner or land management agency responsible for protecting these resources in perpetuity. 16-8 cont.

The National Park Service manages the public lands on which these springs and seeps are located. The Organic Act of 1916 tasks the NPS with the mission and mandate to "conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (16 U.S.C. § 1 *et seq.*). For these reasons, we strongly urge the BLM to implement a groundwater model and monitoring plan that includes Soda Spring, the springs and seeps along Zzyzx Road south and east of Interstate 15, and the aquifer along the playa's western margin.

Air Resources

As identified in Table ES-2, environmental impacts to air resources would be significant and unavoidable. Construction of this project would degrade air quality at the Desert Studies Center, an area of the Preserve operated by the California State University system to introduce students to a pristine desert ecosystem. Air pollutants from construction could contribute to an air quality violation. On the other hand, the net reduction in greenhouse gas emissions potentially realized by this project could be obtained by development in other areas with less impact to natural and cultural resources. 16-9

Connected, Similar, and Cumulative Actions

Wildlife—Avian Species

The analysis conducted in the DEIS/DEIR on potential avian impacts was necessary, and we agree with the finding that potential avian impacts are significant and unavoidable. Although the causes of avian impacts at commercial-scale solar projects remain under investigation, this previously unknown and unsuspected aspect of large-scale development indicates that additional analyses and caution are warranted.

We are especially concerned with the project's possible attraction of migratory birds that typically utilize the spring oasis at Zzyzx. The Zzyzx complex includes springs, small wetlands, and two artificial ponds, all of which attract numerous waterfowl, avian migrants, and winter residents, including special status birds, such as the yellow-headed blackbird and least bittern. Numerous species protected under the Migratory Bird Treaty Act frequent the area. The proximity of the Soda Mountain Solar Project to Zzyzx and Soda Springs is six kilometers on the opposite side of the Soda Mountains. Because of the high number of migratory birds already known to frequent the area, NPS questions whether the project may attract much greater numbers of migratory birds than described in the DEIS/DEIR. The DEIS/DEIR references avian collision risks under investigation at both the Genesis Solar and Desert Sunlight photovoltaic solar projects, similar to the project proposed at Soda Mountain (p. 3.4-36). Weekly and monthly monitoring reports for these projects may be accessed from 16-10

Comment Letter 16

http://www.firstsolar.com/en/Projects/Desert-Sunlight-Solar-Farm and https://efiling.energy.ca.gov/Lists/DocketLog.aspx. 16-10 cont.

Direct, Indirect and Cumulative Impacts

Disturbance of 2,456 acres of vegetation and habitat for a period of at least 30 years would significantly impact natural topography, hydrology, native plant communities, special-status plants, and special-status birds, especially the burrowing owl. Solar energy developments may pose significant, unknown risks to avian species—not only during construction, but also during operation. The proposed Avian Monitoring Program will only quantify the impacts and does nothing to avoid, mitigate, or offset these risks. The requirement to develop an unspecified adaptive management program of unknown duration or utility cannot be analyzed for its effect upon the level of impacts. 16-11

Wildlife—Desert Bighorn Sheep

The DEIS/DEIR currently assumes that sheep will pass through the project site. Bighorn sheep are known to avoid humans and man-made structures. Based on current literature about desert bighorn sheep populations in the Mojave Desert (Epps et al., 2013), bighorn sheep can be expected to migrate on a very limited basis around the Soda Mountain Solar location to the north and south. They would not be expected to move through the project site. The DEIS/DEIR lacks analysis of an avoidance buffer. Addressing sheep migration movements in and around Soda Mountains in the context of known infrastructure avoidance by sheep would increase the accuracy and improve the defensibility of the DEIS/DEIR. If the project moves forward as described in the DEIS/DEIR, bighorn sheep migration between the north and south areas of the project will likely be permanently impeded. 16-12

Wildlife—Mohave Tui Chub

The sole remaining source population of Mojave tui chub lives in MC Spring adjacent to the proposed Soda Mountain Solar project site at Zzyzx in Mojave National Preserve. Its fragile habitat, MC Spring and Lake Tuendae, requires active management to remain viable. There exist four remaining populations of Mohave tui chub in the world. To date, there is not enough information available regarding the groundwater table that feeds MC Spring and Lake Tuendae to know the threshold of impact by groundwater drawdown at the Soda Mountain Solar project site. The NPS disagrees with the DEIS/DEIR analysis that concludes a lack of impact because sufficient information is not available (DEIS/DEIR p. 3.4-70). Without conclusive knowledge about the hydrology of the Soda Mountain Valley aquifer, the Project risks the consequence of irreversible damage to the habitat and the viability of this highly endangered species. We suggest the project proponent characterize the hydrology of the Soda Mountain Valley aquifer and monitor groundwater pumping using a well-designed network of piezometers for early warning of potential impacts to Mohave tui chub. 16-13

Air Quality—Fugitive Dust Emissions

The project's location lies in close proximity to an active eolian transport area, evidenced by active dune systems to the south and east of the Soda Mountains. The analysis of fugitive dust emissions in the DEIS/DEIR does not consider the project's proximity to an active eolian transport area. As a result, it provides an inaccurate analysis of fugitive dust emission and underestimates the project's likelihood to exceed PM_{10} thresholds. 16-14

Mojave National Preserve is a Class II floor area as defined in the Prevention of Significant Deterioration Program under the Clean Air Act (CAA). It is also defined by the Environmental Protection Agency as a nonattainment area for ozone and PM_{10} standards. For these reasons, NPS actively works to ensure no actions within or adjacent to the Preserve will violate federal or state air pollution control laws or regulations, nor will such actions increase emissions or violate state conformity requirements.

Comment Letter 16

Mojave National Preserve's General Management Plan/EIS states that "visibility is probably the most important air quality resource in the desert region, and it is the most easily affected by activities that generate dust (especially fine particulates)." Moreover, the Record of Decision for the General Management Plan states, "The proposed general management plan identifies proactive goals and strategies to inventory, document [and] protect, where possible, the air quality, visibility, night sky and natural ambient sound." (p. 136, General Management Plan, Appendix B) Disturbance during construction, such as removal of vegetation and loosening of the soil crust, will likely result in fugitive dust emissions from much lower wind velocities than current conditions because particulate matter is more easily swept up into the air from areas where the ground has been disturbed. Strong winds are common and capable of generating dust storms from native, undisturbed terrain, and the construction phase of the project could not be accomplished without creating significant ground disturbance.

16-14 cont.

Yet, Mitigation Measure 3.2-1 specifies that water will be applied only to "unpaved roads and unpaved parking areas actively used during operation and maintenance", leaving most of the disturbed construction area as a source of fugitive dust. The applicant-estimated dust emissions included a 55% reduction as a consequence of watering unpaved roads and unpaved parking areas even though the applicant has not "formally committed to implementing an operation-based watering program to control fugitive dust." We anticipate that higher estimates will likely exceed PM_{10} thresholds, and we recommend that BLM and the applicant add fugitive dust abatement measures for all disturbed areas of the project and revise estimates of PM_{10} levels within the DEIS/DEIR accordingly.

Scenic Resources and Dark Night Sky

While cumulative impacts to visual resources from the project are significant and unavoidable, it is not clear how proposed mitigation measures will reduce the adverse impact on the scenic vista caused by the construction of a large solar panel array to less than significant. NPS has identified the desert scenery as a fundamental resource for Mojave National Preserve. Congress provides specific direction for the California desert parks and wilderness areas in section 2 (b)(1) of the California Desert Protection Act, including to "[p]reserve unrivaled scenic, geologic and wildlife values associated with these unique natural landscapes." Moreover, about 700,000 of the Preserve's 1.6 million acres are designated wilderness. We are, therefore, concerned about the project's long-term degradation of the unique visual resources that define the Mojave Desert and contribute to scenic values of the area. The impact analysis in the DEIS/DEIR describes cumulative adverse impacts on the scenic vista, on the character and quality of the site, and on its surroundings that are unavoidable and significant. Project-specific sources of light and glare could degrade the scenic resources and dark night sky of the eastern Mojave Desert region. Photos of other large solar panel arrays (e.g., Silver State North and Copper Mountain) demonstrate significant, long-term, and unavoidable impacts to the scenic vista. "The Project would convert 2,222 acres of naturally appearing desert valley to an industrial facility" deploying "1.7 million flat-plate polycrystalline silicon solar panels grouped into tracking arrays" which would likely be in conflict with BLM's "VRM Class III objectives" for the site and which would negatively impact the views to and from Mojave National Preserve.

16-15

Mitigation Measures 3.18-2 (Construction), 3.18-3 (Operation and Maintenance), and 3.18-4 (Decommissioning and Site Reclamation) do not reverse or reduce these significant adverse visual impacts. The proposed 2,557 acres of solar panels on the landscape will create a significant visual impact that does not currently exist. None of the mitigation measures in Impact Vis-1 for either Construction (page ES-37) or Operation and Maintenance (pages ES-37 to ES-38) address the visual impacts caused by the solar panels themselves. Mitigation measures under Vis-3 refer back to the mitigation measures proposed under Vis-1 (page ES-39). Glint and glare reflected off the panels will negatively impact the visual landscape; the size of the project makes these impacts significant. Based on the DEIS/DEIR analysis, Impacts Vis-1 and Vis-3 are significant and unavoidable.

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Wildlife—Desert Kit Foxes

As with avian species, other wildlife species are likely to be adversely impacted by the project. For instance, 57 desert kit fox dens were recorded during the 2012 surveys of the proposed development area, yet the DEIS/DEIR considers only direct kills and crushed burrows preventing escape and does not analyze the effects of habitat destruction or loss of connectivity. Mitigation Measure 3.4-1b addresses biological monitoring; it does not avoid or reduce impacts to kit fox habitat. As such, NPS recommends the BLM expand its analysis to better consider indirect and cumulative impacts to desert kit fox and further explore meaningful mitigation measures to reduce potential impacts. 16-16

Mitigation for Adverse Impacts

Wildlife—Desert Bighorn Sheep

The DEIS/DEIR considers a project design with an approximate 0.25-mile setback from 20% slopes, to mitigate adverse impacts to desert bighorn populations. It also concludes in its analysis that adverse impacts are significant and unavoidable. We highly recommend the BLM reconsider ongoing research (Epps et al., 2013). Dr. Clinton Epps has demonstrated in his work that the Soda Mountain Solar project would prohibit any future potential to reestablish bighorn connectivity between north and south Soda Mountains. Mitigation options include setbacks of 0.75 miles from slopes greater than 20% so that the concentration of solar arrays are placed away from these slopes, set on poorer-quality habitat to the south of the proposed location. True mitigation would also facilitate a determination of the types of structures that can facilitate bighorn movements across the highway and around the solar arrays; such strategies are suggested in Epps et al. (2013) and consist of modifying underpasses, constructing overpasses, and investigating whether water catchments will help facilitate such movement. We have submitted prior comments with specific recommendations and would welcome the opportunity to meet with BLM and help design such options and highly encourage the development of an environmentally preferred alternative that will put natural resources first and solar development second. Such an alternative also would provide the project with a full range of reasonable and realistic analyses options, a range we consider to be lacking in the current document. 16-17

Artificial Water Sources

Despite the absence of scientific evidence, the Applicant and the BLM are promoting artificial water sources as the only feasible means of mitigation for impacts to bighorn habitat and connectivity. There is no scientific literature or study supporting the notion that presence of water would overcome bighorn aversion to approaching a human-occupied construction site or power plant, and the mitigation measure erroneously attempts to substitute need for water with disruption of connectivity. Although there is circumstantial evidence that water placement can expand or improve already occupied habitat, there is no evidence that it can facilitate movements. The priority connection is between the Soda Mountains north and south of Interstate 15. Placement of water is unlikely to result in spontaneous colonization and habitat utilization as the connection between north Soda and Avawatz is a much greater distance, and the smaller probability of colonization from the south will be reduced by project construction. 16-18

Mitigation by Setbacks from 20% Slopes

Other potential mitigation measures, such as greater setbacks, concentrating development in certain areas, and improving highway crossings suggested by NPS wildlife biologists, appear to have been rejected. We suggested in our comments on the administrative draft (see discussion below) that impacts to desert bighorn sheep could be reduced by minimizing the footprint of the arrays and by maintaining setbacks of 0.75 miles from 20% slopes. Minimization of the project footprint would decrease impacts to the occupied areas of desert tortoise habitat, and the greater setbacks from mountainous areas would decrease impacts to 16-19

Comment Letter 16

desert bighorn sheep. NPS requests the BLM consider and analyze additional mitigation measures with regards to desert bighorn sheep in order to ensure a thorough and accurate environmental impacts analysis. 16-19 cont.

Summary of Comments

NPS previously submitted most of these comments in its review of the administrative DEIS/DEIR for this project as a cooperating agency under NEPA.Those comments are summarized and reiterated here with slight modifications. It would be beneficial to both NPS and the BLM to meet and discuss our comments in further detail. Please contact Ms. Amee Howard, NPS Renewable Energy Speciali, at (702) 293-8645 regarding meeting coordination. 16-20

cc:

MOJA (L Whalon, D Hughson, D Burdette, D Woo)
PWR (M Lee, S Gibbons, S Quinn, T Flanagan, L Rozzell, A Howard)
BLM (T Pogacnik, T Raml, K Symons, E Meyer-Shields, G Miller, Jeff Childers)

Literature Cited

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Comment Letter 17

robert e. reynolds

220 south buena vista street — redlands ca 92374 — rreynolds220@verizon.net

Mr. Jeffery Childers,
Soda Mountain Solar Project Manager,
22835 Calle San Juan De Los Lagos,
Moreno Valley, CA 92553

Cc: Edythe Seehafer, James Shearer, Mickey Quillman

January 9, 2014

Re: Established access to Soda Mountains for scientific research.

Dear Mr. Childers,
In regard to the proposed Soda Mountains Solar Project, please maintain existing established access to all mines and mineral localities located in the Soda Mountains north and south of Interstate Highway 15.

The Soda Mountains contain a very unique mineralogical occurrence for BLM lands west of the Rocky Mountains. The Blue Bell Mine contains Ag-Cu-Pb-Zn-Au-Bi-V-Mo oxides minerals, many of which are very rare throughout the world. This deposit contains more than 85 mineral species that show a paragenetic sequence of deposition that documents the evolutionary development of this type of mineral deposit.

International scientific research at this mine, funded abroad, has produced at least five mineral species that are the world's first records: Plumbophyllite, Fluorphosphohedyphane, Reynoldsite, Bluebellite, and Zzyzxite. The latter two put the central Mojave Desert "on the map" for the mineralogical community of the world. Additional new mineral species that contribute geologic knowledge may occur at this mine or in adjacent mineral deposits. A list of references is appended.

17-1

Thank you for maintaining access to important geologic research areas within the Mojave Desert.

Sincerely,

Robert E. Reynolds
California State University, Desert Studies Center, Board of Directors
President, SoCal Chapter, Friends of Mineralogy

robert e. reynolds

220 south buena vista street — redlands ca 92374 — rreynolds220@verizon.net

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robert e. reynolds

220 south buena vista street — redlands ca 92374 — rreynolds220@verizon.net

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58884 Terra Vista Dr.
Yucca Valley, Ca. 92284
January 9, 2014

To: Congressman Paul Cook
Bureau of Land Management
California Energy Commissioners
San Bernardino County Supervisors

I am a 25 year resident of Yucca Valley, & have spent as many years, with my family, camping, hiking & exploring the Mojave Preserve; 92284 has provided learning opportunities and the overriding pleasures have always been first + foremost the unfettered vistas — finding a spring, a tortoise, bighorn sheep tracks, listening to owls at nights, climbing sand dunes — & seeing nothing else. Hundreds of thousands of others have chosen to visit in a fashion that pays homage to this gem. To 18-1

consciously consider desecrating 1.6 million acres without a pause to even investigate other sites that are closer to the specific needs of the Solar Project for the Soda Mountain — sites that are disturbed already, closer proximity to transmission lines and sites that will not be creating widespread harm to flora & fauna, strikes me and many others as a bizarre move that doesn't even make any financial sense — as proven by previous decisions to not use this area. This area is an inheritance that can be squandered & never regained. We realize & accept that Solar Energy is necessary & that the desert is ample for use but please reconsider the site location. 18-2

Conscious destruction of the wilderness of the Mojave Preserve, is tantamount to destruction of a Civilization, in this island of diversity. Why here?: It is necessary to deeply & soulfully question this choice and the enormous impacts, known & especially the unknown, unresearched issues in this habitat. 18-3

Sincerely,
Phyllis Schwartz

January 19, 2014

Congressman Paul Cook
Bureau of Land Management
California Energy Commissioners
San Bernadino County Supervisors

Gentlemen,

I'm a long time resident of our beautiful desert environment. While Yucca Valley is close to Joshua Tree, my family is a frequent visitor to the Mojave Preserve. My wife & I have taken courses in Egypt and love the area. 19-1

As much as we approve of solar energy the placement of this project (Soda Mountains) is all wrong. It is too close to the Preserve, too impactful on the vistas as well as a real threat to the environment. The amount of water pumped from the aquifers will affect the springs that sustain the bighorn sheep and other desert animal life. 19-2

Sincerely,
Richard Silva

Public Comment Card

Soda Mountain Solar Project

Commentor Name: DEBORAH POLLINGER Date: 1/11/14

Address: 65756 BASELINE, JOSHUA TREE CA 92252

Comment: I AM OPPOSED - SEE ATTACHED

dballinjr@aol.com

20-1

Please indicate whether you would like to receive a copy of the Proposed PA/Final EIS/EIR and the format you would prefer:

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Comment Letter 20

January 11, 2014

Bureau of Land Management

Congressman Paul Cook

California Energy Commissioners

San Bernardino County Supervisors

Dear Congressman Cook, BLM Staff, California Energy Commissioners and San Bernardino County Supervisors:

I am a 15-year resident of Joshua Tree where I operate a consulting business. I am also a regular visitor to the Mojave National Preserve and the surrounding wilderness areas. These are areas that I and many thousands of other visitors treasure and I am very concerned about the impact of the Soda Mountains Solar Project on these lands, the water supply, and the wildlife they support. 20-1 cont.

I oppose the project based on its many adverse impacts, including:

1) Scenic vistas – there are fewer and fewer high desert areas that we can travel without a vista dominated by industrial-scale renewable energy projects. 20-2
2) Desert tortoise – there is a declining amount of habitat that is as suitable for tortoise as this site, especially considering the likely impacts of global warming. The fate of the species may depend on preserving areas like this for habitat. 20-3
3) Groundwater – desert solar projects use significant amounts of water in a land that has very little. In this case MC Springs and its federally protected Tui chub population are threatened. 20-4
4) Economic base – the Mojave National Preserve, like Joshua Tree National Park, supports rural communities with much needed tourism dollars. Negative impacts on park visitorship will result in a significant economic hit to local communities. 20-5

I believe that there are much better alternatives which should first be explored before considering this inappropriate site. 20-6

Sincerely,

Deborah Bollinger

Public Comment Card

Soda Mountain Solar Project

Commentor Name: LARAINE TURK Date: 1/11/14

Address: PO Box 305 Joshua Tree 92252

Comment: See attached printed document.

Please indicate whether you would like to receive a copy of the Proposed PA/Final EIS/EIR and the format you would prefer:

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Soda Mountain Solar Project

Comments to the BLM

The Soda Mountain Solar Project is a misplaced solar project. Yes, we need renewable energy, but the focus of the state and the nation should be on rooftop and distributed solar and not on these large projects. A few large projects, appropriately sited, can certainly be beneficial. But this one is especially misplaced, as it detracts from the rare experience for desert visitors for unadulterated desert vistas that they make a long trip to see. This project would specifically detract from views in the Mojave National Preserve right next to it, and also reduce the chance that visitors will be able to see desert wildlife because it cuts off their mobility corridors. And it is these visitors to our desert lands that keep our local economies from falling apart. This holds true in the Mojave Preserve area just as much as in the Morongo Basin.

21-1

21-2

21-3

21-4

Also, the related water use greatly concerns me. In the larger sense, we are so aware of California's dire condition when it comes to water, and in this case there is the added likelihood of additional injury to wildlife, the tui chub. Use of water in the desert must be carefully considered, and this is not an appropriate way to use precious desert water in this area.

21-5

Living in the desert surrounded by distant mountains and having sweeping views of undisturbed land was on my wish list in my career years. I was lucky enough to be able to retire in Joshua Tree and now live that wish. But, ever since my retirement it seems I've had to fight along with hundreds of like-minded community members for retaining those open desert vistas because of projects like this. We spend hours every month going to meetings, doing online research, spreading the word, and writing letters to express to our

21-6

families, neighbors, and friends a familiar refrain of trying to press OUR GOVERNMENT to LISTEN TO ITS CITIZENS and DO THE RIGHT THING, which includes denying this project for all the reasons stated above.

21-6 cont.

Laraine Turk

PO Box 305

Joshua Tree, CA 92252

Laraine518@earthlink.net

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Wednesday, February 12, 2014 12:23 PM
To: Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mountain Solar CACA 49584

---------- Forwarded message ----------
From: **Misty Watson** <mistywatsonc21@hotmail.com>
Date: Sat, Jan 11, 2014 at 9:10 AM
Subject: Soda Mountain Solar CACA 49584
To: "sodamtnsolar@blm.gov" <sodamtnsolar@blm.gov>

Dear Mrs. Childers, I writing you today asking to keep access to the Soda Mountains open to Rock Hounding. Many clubs in California and Nevada collect in the Soda Mountains and we would like to keep our access open for Rock Hounding for future use. For many years our club Mother Lode Mineral Society has collected rocks for lapidary use in the area. Our CO-OP of Field Trip Chairman s Association has also had field trips to the area. I request that any road closures to the Soda Mountains be kept open for future use and access. If you would like more information about our Association and member clubs please go to http://www.ourfieldtrips.org Sincerely, 22-1

Misty Watson Mother Lode Mineral Society and Secretary for CO-OP Field Trip Association

Misty Watson Hometown Realtor
Cal Bre # 01209655 Licensed Since 1996
Almond Valley Realty
180 Leveland Ln. Ste. 4
Modesto Ca. 95350
Cell 209-214-3547 Direct office line 209-338-2316
Fax 209-529-3946

Public Comment Card

Soda Mountain Solar Project

Commentor Name: Toni M Calloway Date: Jan 11, 2014

Address: 60555 Onaga Trl., Joshua Tree, CA 92252

Comment: Alternatives in DEIS do not meet NEPA requirements

1.) Large remote solar projects are not economically or environmentally viable. The only reason Bechtel is interested in this site is that an ill conceived earlier proposal has essentially grandfathered the site with respect to current environmental regulations. 23-1 23-2

2.) There is insufficient water resources in the local area to support construction. There is bogus hydraulogic modelling supporting the theory that there is an impermeable boundry between the project and down gradient springs which support local wildlife such as big horn sheep and proride habitat for the indangered chub fish. 23-3

3.) The project will also block access to very rare mineral resources at the Blue bell Mine at which numerous rare minerals have been discovered. 23-4

Sincerely, Toni Calloway

Please indicate whether you would like to receive a copy of the Proposed PA/Final EIS/EIR and the format you would prefer:

☐ Compact Disk (CD) ☑ Hardcopy ☐ Do not send me a copy

Calif. Registered Professional Geologist

attention:

January 9, 2014

Congressman Paul Cook
Bureau of Land Management
California Energy Commissioners,
San Bernardino County Supervisors

I live in Joshua Tree and I moved here when I retired because the California desert is beautiful and unique.

One of the areas that I have visited several times is the Soda Mountains. There are rare geologic, hydrologic and wildlife resources in this area. It is not empty desert.

This area is poorly considered for a major solar project because of its distance from urban areas where the power will be used. There is a lack of major transmission capacity from this remote site. The project is also up-gradient of major freshwater springs. The project proponents maintain there is a major bedrock barrier between the project site and the springs but there is no hard data to support their contention. In addition, the water resource needs of the project exceed the downgradient discharge rate at the springs. 23-5 23-6

Sincerely,

Joni M Calloway - Cert. Registered Geologist

Comment Letter 24

DEPARTMENT OF PUBLIC WORKS

FLOOD CONTROL • LAND DEVELOPMENT & CONSTRUCTION • OPERATIONS
SOLID WASTE MANAGEMENT • SURVEYOR • TRANSPORTATION

COUNTY OF SAN BERNARDINO

825 East Third Street • San Bernardino, CA 92415-0835 • (909) 387-8104
Fax (909) 387-8130

GERRY NEWCOMBE
Director of Public Works

January 15, 2014

File: 10(ENV)-4.01

Bureau of Land Management
California Desert District Office
Attn: Jeff Childers
22835 Calle de Los Lagos
Moreno Valley, CA. 92553

RE: CEQA – NOTICE OF AVAILABILITY FOR A DRAFT ENVIRONMENTAL IMPACT STATEMENT/ DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE SODA MOUNTAIN SOLAR PROJECT FOR THE BUREAU OF LAND MANAGEMENT

Mr. Childers:

Thank you for giving the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. **We received this request on December 3, 2013,** and pursuant to our review, the following comments are provided:

Transportation Planning Division (Omar Gonzalez, PWE III, 909-387-8164):

1. The project proposes to realign 2.6 miles of Rasor Road, and the new road is proposed to be 26'wide (page 3.16-6). Per the circulation element, Rasor Road is designated as a secondary highway with a right of way width of 88'. Sufficient right of way should be reserved for the ultimate circulation element build-out. 24-1

Should you have any questions, please contact the individuals who provided the specific comment, as listed above.

Sincerely,

ANNESLEY IGNATIUS, P.E.
Deputy Director – Environmental & Construction

ARI:PE:nh/CEQA Comments_DEISDEIR_BLM_Soda Mountain Solar

Alexandra Kostalas

From:	jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent:	Wednesday, February 12, 2014 12:23 PM
To:	Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject:	Fwd: Soda Mountain Solar - Failure to provide available documents

---------- Forwarded message ----------
From: **Ed LaRue** <ed.larue@verizon.net>
Date: Wed, Jan 15, 2014 at 5:39 PM
Subject: Soda Mountain Solar - Failure to provide available documents
To: sodamtnsolar@blm.gov
Cc: Sid Silliman <gssilliman@csupomona.edu>, Seth Shteir <sshteir@npca.org>, Jeff Aardahl <jaardahl@defenders.org>, Stephanie Dashiell <SDASHIELL@defenders.org>, april@wildlandsconservancy.org, ianderson@biologicaldiversity.org, Becky Jones <dfgpalm@roadrunner.com>, Bruce Palmer <BPalmer@logansimpson.com>, Chris Noddings <Chris.Noddings@cardnotec.com>, Dan Pearson <wldlifebio@aol.com>, Ed LaRue <ed.larue@verizon.net>, Glenn Stewart <grstewart@csupomona.edu>, Joe Probst <probst2552@roadrunner.com>, Ken MacDonald <kmacdonald@newfields.com>, Kristin Berry <kehberry@gmail.com>, Maggie Fusari <maggiefusari@gmail.com>, Mari Quillman <mquillman@ecorpconsulting.com>, Michael Tuma <mtuma@ecorpconsulting.com>, Mike Bailey <mike.bailey@mediacombb.net>, Pete Woodman <kivabio@aol.com>, Tracy Bailey <tracy.bailey@mchsi.com>

Mr. Childers,

Representing the Desert Tortoise Council, I was one of five members of the public that attended the Soda Mountain Solar Draft EIS public comment meeting in Barstow, CA on 1/9/2014.

Our main concern is that the BLM has not provided the public with all the biological baseline information that is available. During the public meeting, I discovered that Kiva Biological Consulting performed focused desert tortoise surveys throughout the site in 2013, yet none of that survey information is available on the BLM's website providing the Draft EIS and, in particular, the "Biological Resources Technical Report." Since the Draft EIS is dated November 2013, I would assume that tortoise surveys performed on the site earlier in 2013 should have been at least referenced in the draft document. We feel strongly that our ability to fully analyze the impacts of this proposed project on tortoises requires that we have all the information that is available. People not attending the public meeting on 1/9/2014 may not even be aware that not all of the available information has been provided.

25-1

I expressed my concern on 1/9/2014 and asked that the BLM webpage be updated to include Kiva's survey results. I see as of today (1/15/2014) that the webpage remains the same.

I was informed following the comment period of the workshop, by one of Bechtel's consultants that she would email me with Kiva's biological report on 1/13/2014. It is now 1/15/2014, and I have still not received the document. I ask that the BLM and/or project proponent please amend the BLM webpage to make this survey report available. I'd also like to ask Bechtel's consultant to provide me with the report as soon a possible, as promised.

25-1 cont.

Thank you for your time,

Ed LaRue

Desert Tortoise Council, Ecosystems Advisory Committee

****

Edward L. LaRue, Jr., M.S.

Desert Tortoise Council, Ecosystems Advisory Committee

P.O. Box 1568

Ridgecrest, California 93556

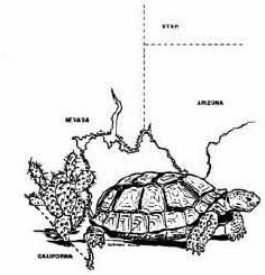
ed.larue@verizon.net

Office: (760) 249-4948

Cell: (760) 964-0012

Website: deserttortoise.org

****



DESERT TORTOISE COUNCIL
4654 East Avenue S #257B
Palmdale, California 93552
www.deserttortoise.org
ed.larue@verizon.net

1 March 2014

To: Mr. Jeffery Childers, Soda Mountain Solar Project Manager
Bureau of Land Management
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553
sodamtnsolar@blm.gov

RE: Formal comments on the Draft Environmental Impact Statement for Soda Mountain Solar project (CACA 49584)

Dear Mr. Childers,

The Desert Tortoise Council (Council) is a private, non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of this species. Established in 1976 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council regularly provides information to individuals, organizations and regulatory agencies on matters potentially affecting the desert tortoise within its historical range.

Herein, we provide formal comments on the Draft Environmental Impact Statement (Draft EIS) for Soda Mountain Solar project (CACA 49584):

1. Measure 71 in Table 2-5, page 2-32 of the Draft EIS states: "An adequate number of trained and experienced monitors must be present during all construction and decommissioning activities in unfenced areas, depending on the various construction tasks, locations, and season. The approved biologist shall be on site from April 1 through May 31 and from September 1 through October 31 (active season) during ground-disturbing activities in areas outside the exclusion fencing, and shall be on-call from November 1 to March 14 (inactive season)." This particular measure implies that only active tortoises found aboveground are subject to impacts. In fact, ground-disturbing activities are just as likely to impact tortoises in their burrows, regardless of the season. Additionally, both adult and subadult tortoises may be active and out of their burrows year-round, which is facilitated by warmer temperatures in the winter months and rainfall in the summer months. 25-2

We strongly recommend that authorized biologists be onsite for **all** ground-disturbing activities, throughout the year. The wording in APM 71 on page 3.4-29 should require that authorized biologists and/or environmental monitors be onsite whenever ground-disturbing activities occur, regardless of the time of year; excepting those fenced areas that have already been cleared of tortoises during previous clearance surveys. We also note that none of these seasonal restrictions are reiterated in Section 3.4.8, where detailed descriptions of tortoise mitigation measures are presented. 25-2 cont.

2. Measure 73 in Table 2-5, page 2-32 states: "Compensatory habitat mitigation shall be provided at a 1:1 ratio for impacts to suitable desert tortoise habitat during construction. A habitat compensation plan will be prepared to the approval of CDFW, USFWS, and BLM." Whereas the BLM is likely to assess a per-acre compensation fee for development, California Department of Fish and Wildlife (CDFW) will require habitat compensation, endowment funds, and enhancement fees. It is extremely unlikely that CDFW will accept only 1:1 habitat compensation. Rather than state the compensation ratio will be 1:1, it is advisable to state that the compensation ratio will be determined in consultation with CDFW and other agencies. We suggest that AMP 73 given on page 3.4-29 be modified to reflect this reality. Discussions under Mitigation Measure 3.4-2d on pages 3.4-60 and -61 may also need to be modified. 25-3

3. Under **Alternative E**, the No Action Alternative, "The BLM would continue to manage the land consistent with the site's multiple use classification as described in the CDCA Plan. Based on the CDCA Plan amendments made in the Solar PEIS ROD, for future applications the site would be identified primarily as variance areas open to future applications for solar development, subject to the procedures identified in the Solar PEIS, and some exclusion areas in the southeast portion of the site that would be closed to such applications. In the case of variance areas, future projects would still require a CDCA Plan Amendment to move forward. These projects would be subject to applicable laws and land use plans" (Section 2.6.1., page 2-36). Although the Council appreciates that this alternative would result in no project at this site, we prefer Alternative G, since Alternative E would leave the site open to future solar development. 25-4

4. Under **Alternative G**, "The BLM would continue to manage the land consistent with the site's multiple use classification as described in the CDCA Plan with the exception that solar development would be precluded on the site" (Section 2.6.3., page 2-37). As such, Alternative G has the advantage of specifically excluding this particular site from future solar development, and is the Council-preferred alternative. 25-5

5. It is not clear in the Section 2.8.1 discussion of site alternatives that the proponent considered thousands of acres of biologically-impaired habitats east of Barstow, between Interstate-15 and Interstate-40, for example, although there is one mention of the Barstow Marine Corps Logistics Base on page 2-41. In a number of places, it seems that if the alternative site does not occur between Las Vegas and Barstow it is unacceptable, which dismisses thousands of acres of impaired private lands in the Victor Valley, for example. It seems as if all potential alternatives had the same regional restriction that the site must occur along I-15 between Vegas and Barstow, which eliminates many other, better suited alternative sites outside this corridor. 25-6

6. Section 2-7, page 2-38 concludes, "The CEQA Guidelines define the environmentally superior alternative as that alternative with the least adverse impacts to the project area and its surrounding environment; therefore, Alternative E [No Action Alternative] is considered the environmentally superior alternative for CEQA purposes because it would not create any of the localized impacts of the Project, even though would have a less beneficial impact than that of the Project on greenhouse gases." Although Alternative G is preferred, Alternative E is also an acceptable alternative to the Council. 25-7

7. The proponent hired Peter Woodman to conduct protocol tortoise surveys, which are reported in Kiva Biological Consulting (2013). Therein, Woodman recommends that the eastern half of the East Array be excluded from development to avoid occupied tortoise habitat. Which of the alternative configurations follow this considered recommendation? It is not clear from the alternatives presented in the Draft EIS that Woodman's recommendations were followed. We recommend that such an alternative be included in the Final EIS and that it be fully analyzed for its reduced impacts to tortoises compared to the proponent's preferred alternative. 25-8

8. Contrary to the statements in Section 3.3.3.1 on page 3.3-17, the West Mojave Coordinated Management plan (WEMO Plan) was not adopted as a habitat conservation plan, was not implemented by either San Bernardino County or the City of Barstow, and does not provide for streamlined approaches for private entities to satisfy endangered species act requirements. Its prescriptions do apply to public lands managed by the BLM, as stated in the Draft EIS. These inaccuracies are repeated in Section 3.4.3.1 on page 3.4-21. 25-9

9. On page 3.4-9, the Draft EIS reports the following with regards to tortoise distribution in the study area: "Tortoise activity on the Project site *seems to be limited to the East Array area* [emphasis added], where sign was moderately wide-spread, particularly at the foot of the mountains to the east. Carcasses of two tortoises were detected in the North Array study area, but south of the North Array site, and tortoise sign was not detected in the South Array study area." The statement is somewhat misleading with regards to tortoise activity northwest of Interstate 15, as the presence of carcasses is still indicative of tortoise activity, even if only historical, in the North Array study area. This is critically important when the amount of compensable habitat is determined; **all** portions of all arrays, including those with only carcasses, are compensable. 25-10

10. Importantly, the descriptions referenced above fail to recognize that 5 tortoise burrows, 3 rock cover sites, 9 scat, and 3 carcasses were found at the Opah Ditch Mine in 2001 by AMEC, which is in the vicinity of the North Array study area, as reported in Panorama's 2012 report and depicted in Figure 10, therein. We note that these tortoise sign are presented in Figure 3.4-1 of the Draft EIS, but are not mentioned in the text, and provide evidence that tortoise sign is not limited to the East Array area as stated on page 3.4-9. Survey Results presented in the text on pages 3.4-8 and 3.4-9 must be augmented by results depicted in the appendices to be comprehensive in the Final EIS, particularly when known, published data clearly show that more than two dead tortoises occur (or have recently occurred) within the North Array study area, all of which must be considered compensable habitat. 25-11

11. On page 3.4-15, the Draft EIS fails to acknowledge that on 26 June 2013, Townsend's big-eared bat was identified as a candidate species for endangered species listing in California by the Fish and Game Commission. Whereas the state and federal statuses are given for all other animals in Section 3.4.2.3., State and federal statuses are omitted for Townsend's big-eared bat in this discussion. This may be explained by the date of the comprehensive biological report of March 2013 (Panorama Environmental Inc. 2013), but since the Draft EIS is dated November 2013, the June 2013 designation should have been acknowledged in the Draft EIS and impacts to this candidate species must be analyzed in the Final EIS.

12. Since Townsend's big-eared bat is currently designated as a candidate for State listing, we feel that the analysis in the Final EIS must be substantially greater than that given in the Draft EIS. As above, the Final EIS also needs to divulge this recent designation, which may warrant more mitigation than is currently provided for in the Draft EIS. The significance discussion given under Section Impact Wild-7 on page 3.4-69 should be expanded to discuss impacts to this new candidate species.

25-12

13. On page 3.4-19, the Draft EIS indicates that only one burrow with American badger digs was found. During our brief reconnaissance surveys on 12/12/2012, LaRue and Radakovich found 11 diagnostic badger digs within the North Array area and 8 digs within the East and South Array areas. We note that there are no mitigation measures identified in Table 2-5 for this species. Given our survey observations on only a fraction of the project area, we suggest that American badger is far more common than the Draft EIS suggests, and that mitigation measures are warranted to minimize impacts to this California Species of Special Concern. Although Kiva Biological Consulting (2013) indicates that badger sign was recorded (page 2 in Methods), it is not mentioned in the Results section. We cannot tell in Figures 7 and 8 which digs were attributed to badgers versus canids, as they are depicted with the same symbol.

25-13

14. Although we understand that the raven management plan is still to be submitted to the regulatory agencies, the Council believes that the proponent should commit to providing funds to the U.S. Fish and Wildlife Service (USFWS) for raven control and management. In a February 2011 biological opinion (8-8-10-F-66) to the Joshua Basin Water District, the USFWS (2011) required that the water district provide $105/acre of impact to this raven control program. As a recent standard applied to other projects in the West Mojave, the Council feels that this fee should also apply to this project.

25-14

15. With regards to impacts, it is not clear why on page ES-1 of the Executive summary, the Draft EIS indicates that **2,557 acres** would be disturbed; on page 3.4-31, **2,455.57 acres** are identified as being permanently lost; and in the biological technical report (page E.1-12 in Appendix E), Table 1.3-1 reports that **2,968.5 acres** would be permanently lost. As the Draft EIS indicated in footnotes to several tables and on page E.1-10 in Volume 2, all impacts are considered permanent, so it's not clear why there are so many discrepancies among reported impact acreages. We strongly suggest that the estimated compensable habitat be identified in the Final EIS under Mitigation Measure 3.4-2d, which currently describes compensable impacts without ever estimating the acreage to be compensated.

25-15

16. Although the fourth paragraph on page 3.4-33 indicates there is an undisclosed estimate of the number of tortoises that may be present on the Project site, the Draft EIS never reveals this number. Assuming the biologists used the USFWS formula for estimating the number of tortoises that may occur based on survey findings, this estimated number must be included in the Final EIS to accurately determine the level of anticipated take, and to allow the regulatory agencies to determine how accurate that estimate is, if the project is developed. 25-16

17. Although the Draft EIS was circulated in November 2013, it never refers to Peter Woodman's (Kiva Biological Consulting 2013) April and May 2013 surveys of the three arrays, a North Translocation Area, South Relocation Area, and Burrowing Owl Buffer Areas. In fact, translocation areas are not specifically discussed in the Draft EIS, as they must be in the Final EIS. Many of the results given in the Draft EIS are corroborated by Woodman's findings, which are never divulged. Woodman also reports the estimated tortoise density of two adult animals, but this is not in the Draft EIS. The Final EIS must fully divulge the results of Woodman's survey results for it to be complete and acceptable. 25-17

18. The Final EIS needs to assess Woodman's (Kiva Biological Consulting 2013) findings to determine if the South Relocation Area and North Translocation Area are appropriate to receive displaced tortoises. On page 4, Woodman reports that five tortoise carcasses were found in the North Translocation Area. Does this indicate that the North Translocation Area may not be acceptable if only dead tortoises are found there? Similarly, tortoise sign had a "limited distribution" in the South Relocation Area; as such, is it still appropriate to receive displaced tortoises? The Final EIS needs to consider these data and determine if these translocation areas will or will not be appropriate. If not, does the proponent plan to survey new translocation areas? 25-18

19. Please note in Section 3.4.8 on page 3.4-51 that the Designated Biologist and field contact representative are not synonymous. Whereas the Designated Biologist serves to implement all protective measures and minimize impacts to tortoises and occupied habitats, the field contact representative serves as the liaison among the many involved parties, particularly in regards to compliance reporting. In practice, the Designated Biologist and field contact representative are rarely the same person. 25-19

20. We strongly recommend that Mitigation Measure 3.4-2b on page 3.4-58 be modified to indicate that the agency-approved Desert Tortoise Translocation Plan (DTTP) must be finalized and approved **before** any ground-disturbance activities occur or any tortoises are handled. As written, the Draft EIS indicates that a draft DTTP has been written (see page 3.4-33) but the formal mitigation measure fails to indicate a timeframe in which the DTTP must be completed. As above, will the proponent choose new translocation areas and analyze them in the Final EIS? We strongly discourage displacing tortoises into areas where only dead or no evidence of tortoises are found. How will potential for disease transmission among translocated and host tortoises be considered in the DTTP? 25-20

21. Under Mitigation Measure 3.4-2c-4b on page 3.4-59, in the event a tortoise is found dead, the Final EIS should reference any restrictive measures that may be required by either USFWS or CDFW. If that mortality results in exceeding the mortality take limit identified in the federal biological opinion, for example, project construction may need to be halted until formal consultation is reinitiated. This and any other remedial actions should be documented in the Final EIS. 25-21

22. Mitigation Measure 3.4-2d on pages 3.4-60 through 3.4-63 provides extensive, detailed information about acquiring compensation lands but only indirectly refers to habitat management without requiring that an agency-approved habitat management plan is drafted by the approved management entity. The Final EIS must specify that a habitat management plan will be written for acquired lands, address threats to those lands based on field surveys identifying those threats, and state that the compensatory lands will be managed in perpetuity and not be subject to future development. 25-22

23. We suggest that Mitigation Measure 3.4-5a on page 3.4-64 be amended with a fourth stipulation that indicates emergency measures to be implemented if a tortoise is accidentally injured or killed during routine operations and maintenance. This amended measure should also indicate that BLM, USFWS, and CDFW will be contacted immediately to provide input into how future injuries and mortalities can be avoided. It should also assess whether incidental take statements in the biological opinion or State 2081 permit have been met or exceeded by the particular event. 25-23

24. Mitigation Measure 3.4-5b on pages 3.4-64 and -65 fails to mention that the Worker Education Awareness Program (WEAP) should be administered on, at least, an annual basis to all facility employees, which is the industry standard for all other public agencies whose employees provide routine operation and maintenance activities in occupied tortoise habitats. 25-24

In conclusion, we appreciate that the Draft EIS dealt with most of the points the Council raised in our scoping letter (Desert Tortoise Council 2012), including points 1 and 2 (alternative sites are discussed); 3 and 4 (no longer emphasizing how badly disturbed the habitats are); 5, 6, and 7 (survey quality increased with detection of tortoises, where the proponent formerly asserted no impacts would occur); 8 (incidental take permits are being solicited); 9 (fringe-toed lizards were found in the area like we had suggested); 10 (better reference to existing studies); 11 (like we found in December 2012, burrowing owls are known to be on the site); 12 (similarly, American badger occurs, though the Draft EIS still fails to determine the level of impact); and 13 and 14 (the Draft EIS is more accurate regarding tortoise occurrence rather than referring to inferior tortoise habitats). Finally, we are still in support of Alternative G, as the location of the proponent's preferred alternative site was poorly chosen and would result in the loss of good-to-pristine habitats. 25-25 25-26

Submitted by,

Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson
Edward L. LaRue, Jr.

Literature Cited

Desert Tortoise Council. 2012. Public scoping comments on the proposed Soda Mountain Solar project (CACA 49584). Scoping comments prepared by Ed LaRue on behalf of the Council and submitted to Jeffrey Childers of the BLM on 12/13/2012. Ridgecrest, CA.

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Panorama Environmental, Inc. 2012. Analysis of habitat suitability and connectivity in the Soda Mountain area, San Bernardino County, California. An unpublished report prepared by Susanne Heim and Laurie Hietter, dated July 2012. San Francisco, CA.

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U.S. Fish and Wildlife Service. 2011. Biological Opinion on the Joshua Basin Water District, Water Recharge Basin and Pipeline, San Bernardino County, California (8-8-10-F-66). Formal biological opinion issued by the Ventura Office of the USFWS to Charlotte Ely of the Environmental Protection Agency. Ventura, CA

Comment Letter 26

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Wednesday, February 12, 2014 12:23 PM
To: Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Comments on Soda Mountain solar project

---------- Forwarded message ----------
From: **David Carpenter** <David.Carpenter@cgu.edu>
Date: Fri, Jan 17, 2014 at 9:48 AM
Subject: Comments on Soda Mountain solar project
To: "sodamtnsolar@blm.gov" <sodamtnsolar@blm.gov>

Mr. Childers,

As a frequent visitor to the Mojave National Preserve, a frequent traveler on Interstate 15, and someone who has watched the impact of large scale projects on the Mojave landscape and ecosystem over many years, I have deep concerns about the Soda Mountain Solar Project.

Yes, we need to explore sources of alternative energy, but I don't believe this project is a step forward. Instead, it sets a potentially dangerous standard of intrusion upon the landscape by disrupting the scenic value of this unique area while also destroying important water resources for bighorn sheep and habitat for tortoises and other animals. The desert here is rugged but frail, and this large scale intrusion will be irreversible for generations to come.

Set along the interstate, this project will not only be biologically disruptive, it will stand as an advertisement for further environmental degradation. As a matter of public policy, I believe we should minimize this impulse rather than project it large scale.

26-1

Finally, underlying these pragmatic concerns is something less tangible but just as troubling and long term. Each industrial incursion into wilderness areas like this makes it easier for the next wave of development and exploitation. In this sense, drawing energy from the undeveloped areas will inevitably necessitate producing even more energy. This project is not an answer, but rather a further extension of a growing problem. We end up chasing our own tail.

26-2

I urge the BLM to reconsider this project. 26-3

David Carpenter

265 Blaisdell Drive

Claremont CA 91711

909 621 4126

Comment Letter 27

Michael E. Gordon
725 Rose Avenue
Long Beach, CA 90813

22 January, 2014

Jeffrey Childers, Project Manager
BLM California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553

Re: *proposed* ***Soda Mountain Solar Project***

Dear Mr. Childers and *Bureau of Land Management*:

I request that the proposed Soda Mountain Solar Project be DENIED. There are many suitable locations for this project which would not permanently destroy undeveloped California desert lands, including designated *Solar Energy Zones*, brownfields, and rooftops. Siting this project immediately adjacent to the *Mojave National Preserve* is inappropriate and the project must be moved elsewhere. 27-1

The commentary letters submitted by individuals, environmental organizations, California government agencies, and entities such as the *National Park Service* during the October to December 2012 scoping period and summarized in the *Scoping Report* delineate a host of likely environmental consequences to public lands and to the *Mojave National Preserve* (the third largest unit of our *National Park* system in the contiguous U.S.), many of which are likely irreversible. The potential for significant environmental impacts include decreased spring discharge in the Soda Springs area (Zzyzx) as a result of groundwater pumping for the project; loss of habitat for the endangered Mohave tui chub pup fish; loss of desert tortoise habitat; increased habitat fragmentation for desert bighorn sheep; and the loss of wildlife connectivity with the northern Soda Mountains. 27-2 27-3

The consequences for the Mojave National Preserve are of special concern because the project threatens not only the particular resources and landscape that Congress mandated to be protected by the *California Desert Protection Act of 1994*, but the very integrity of this treasured unit of the National Park System. The integrity of the Preserve — its essential quality — rests on the fact that it (a) protects a relatively intact ecosystem of the eastern Mojave Desert from threats associated with commercial development, (b) provides connectivity between other protected national areas within the Mojave desert region, and (c) provides opportunities for solitude, thereby functioning as a refuge from urban areas. It is disingenuous to reject this argument merely because the project would be sited on the doorstep of the Mojave National Preserve rather than within its boundaries. The currently undeveloped, natural area at the northwest corner of the *Mojave National Preserve* where the project is proposed is effectively part of the park. 27-4

Mojave National Preserve vistas would be obscured by project buildings and PV panels attached to single-axis trackers with a minimum height of 20 feet. In order to ensure solitude for visitors and a refuge from urban areas, the *National Park Service* manages the *Preserve* to protect dark skies. A solar facility at the corner of the *Preserve* is incompatible with that management goal because the lighting of solar facility will significantly degrade the visitor experience, and the project will violate the visual integrity of the *Preserve (*and the *NPS Mission Statement)*. 27-5

Approximately 550,000 people visit the Preserve annually and their experience will be impacted by Soda Mountain Solar. School children from the gate-way community of Barstow, many of whom have never been to a national park, travel via Zzyzx Road (and through the project if it is built) on National Park Service-organized field trips to the Desert Studies Center to experience the desert up close, to learn of the history and culture of the Chemehuevi, and, and to see the bighorn sheep that frequent the springs in the area. *The Desert Studies Center*, a field station of *California State University*, is listed on the National Register of Historic Places. It provides an opportunity for these children to receive instruction among natural ponds, dry lakes, and rugged mountains. Local citizens who use the Rasor Off-Highway Vehicle Area will be impacted by the realignment of Rasor Road. The safety of the thousands who travel to and from Las Vegas on Interstate 15 may be at risk from the glare of the estimated 1.5 million PV panels that will comprise the facility.

27-6

27-7

27-8

While this project will benefit Bechtel and other corporate interests, it simply does not serve the public interest or the *Mission Statement* of our *National Park* system. Proposed energy developments should be sited on previously-disturbed lands or through distributed generation at sites near where the electricity is consumed. If National Parks are "*America's best idea*", siting an industrial energy project on a *National Park* doorstep surely qualifies as *America's Worst Idea*.

27-9

I vehemently OPPOSE the *proposed Soda Mountain Solar Project* and urge that it be DENIED. Thank you for the opportunity to comment.

27-10

Sincerely,

Michael Gordon
michael_gordon@charter.net
(562) 201-0856

Comment Letter 28

Alexandra Kostalas

From: Childers, Jeffery <jchilders@blm.gov>
Sent: Saturday, January 25, 2014 5:21 PM
To: Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mountains Solar Project

Jeff Childers

---------- Forwarded message ----------
From: "Cody Dolnick" <woland92107@yahoo.com>
Date: Jan 25, 2014 2:35 PM
Subject: Soda Mountains Solar Project
To: "ksymons@blm.gov" <ksymons@blm.gov>, "traml@blm.gov" <traml@blm.gov>, "jchilders@blm.gov" <jchilders@blm.gov>
Cc:

Dear BLM,

Regarding the Soda Mountains Solar Project, I urge you to enact the following proposals: 1. that the BLM begin recording citizen's oral comments during public meetings; 2. that a supplemental environmental impact study be conducted to assess locating the project in a better, preferably previously-disturbed area; and 3. that 60 additional days of public comment on the project be granted past the current March deadline. 28-1 28-2 28-3

Thank you.

Sincerely,

Cody Dolnick
PO Box 942
Joshua Tree, CA
92252

Dear Congressman Cook, Bureau of Land Management staff, California Energy Commissioners and San Bernardino County supervisors,

My name is Cody Dolnick, and I live in Joshua Tree California. I am a teacher in the Calif. Community colleges and a wildlife rehab volunteer for a major wildlife rehabb facility in Southern California. Most importantly, I am a ~~frequent~~ visitor to the Mojave National Preserve.

The Soda Mountain Solar project is an atrociously bad idea. It's adverse impacts on the surrounding region are numerous and egregious, compromising water resources in the region in addition to blocking Bighorn sheep migration corridors in the area. The endangered desert tortoise will also be negatively affected, and the nearly extinct desert fish known as tui chub could be driven of the brink by this project.

28-4

The project's proximity to the Mojave National Preserve will only further imperil this sensitive ~~&~~ and beautiful region's wildlife and economic contribution to surrounding communities, the latter of which brings in over 12 million dollars to the region's economy every year. Scenic vistas, recreational opportunities for the preserve's visitors, and the Park services management goals will also be damaged.

28-5

Please do everything in your power to stop this project! We cannot let our genuine need for clean energy alternatives destroy the very planet we are trying to save. Solar panels before exclusively on previously damaged lands, rooftops, brownfields and clean up sites. The people of my area need and want a democratized, distributed energy grid that ~~kills~~ literally empowers households of the source!

28-6

Sincerely,
Cody Dolnick

Comment Letter 29

Alexandra Kostalas

From: Childers, Jeffery <jchilders@blm.gov>
Sent: Saturday, January 25, 2014 5:20 PM
To: Soda Mountain Project EIS-EIR; Alexandra Kostalas; Janna Scott; Michael Manka
Subject: Fwd: Soda Mountain Solar

These are public comments on the draft and for this AR.

Jeff Childers

---------- Forwarded message ----------
From: <moneywhys@aol.com>
Date: Jan 25, 2014 11:46 AM
Subject: Soda Mountain Solar
To: <traml@blm.gov>, <ksymons@blm.gov>, <jchilders@blm.gov>
Cc:

Dear Ms. Raml, Ms. Symons, and Mr. Childers:

I attended the recent meeting held at the Travel Lodge in Yucca Valley to give an update on the Soda Mountain solar project and to provide community residents to comment.

It was very troubling that there is not an official record of the meeting. Most meetings of this type would have a professional stenographer attending to place the dialog into the public record. Lacking that, and the notes taken sporadically hardly constitute accurate summaries and therefore, I would submit that the meeting could not be an classified as an official meeting. 29-1

The need for a further environmental impact study that focuses on the project relocating to previously disturbed areas seems in order. 29-2

Since I question the integrity and completeness of the process to date, I fully support an extension of the public comment period for another 60 days beyond the current March deadline. 29-3

Thank you for your consideration.
Donald J. Krouse

Donald J. Krouse
PO Box 340
Morongo Valley, CA 92256
760-363-3849
moneywhys@aol.com

Comment Letter 30

15457 Eto Camino Rd.
Victorville, CA 92394
February 1, 2014

Jeffery Childers, Project Manager
BLM California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553

Dear BLM:

I am totally opposed to this site for the Soda Mountain Solar project. This proposed site is on the boarder of the Mojave Nation Preserve, the Zzyzx Study Center and the Soda Mountain Wilderness Study Area. This park unit is without compare, one of the best intact desert ecosystems in the United States. It has 8,000 foot mountains, unique sand dunes, springs, Cima Dome, volcanoes, canyons, Soda Dry Lake, the worlds largest Joshua tree forest, wildlife and plant life, most of which has not even been discovered and studied. 30-1

The Mojave Preserve draws many visitors from around the world to enjoy the camping, hiking, touring, astronomy, and botanizing. Many of us come for the beautiful vistas, the quiet and solitude. It is important that this park unit is protected from the impacts of projects like the Soda Mountain Solar project. Not only would the view shed in the park be impacted, but travelers on the freeway would lose the beautiful views on both sides of the road. 30-2

It is also necessary to consider the cumulative effects of such projects. A recent map of proposed projects showed the Mojave Preserve surrounded by such projects. The impacts from such projects would be devastating to the Mojave Preserve. The views would be destroyed, the quiet and solitude gone, the water for springs and wildlife gone, and the air quality diminished. 30-3

The alternatives were woefully inadequate. The only alternatives offered were somewhat different configurations on the same footprint. No other sites were offered as an alternative. There are other alternatives. 30-4

This project would have huge impacts on wildlife. The Soda Mountains are an important to bighorn sheep conservation. Biologists are working on the migration corridors of the bighorn to ensure genetic diversity so that they will survive. This project would be right in that area so would abort such work. 30-5 There is other wildlife that would suffer from this project such as the desert tortoise, tui chub, golden eagles. 30-6

Water is also an important issue. The desert cannot afford to lose water to such a project. While in such a major drought, all the desert water is needed for wildlife and plants. A draw down of water would be disastrous. 30-7

This project is not compatible with the Mojave National Preserve, or the Soda Mountain Wilderness Study Area, which is being considered for designation for National Conservation Lands. 30-8

We need to stop this rush to site such projects and look at using sites near the areas of use and, of course, promote roof top solar. 30-9

Sincerely,

Carol A. Wiley

Carol A. Wiley

Good afternoon,

My name is Carol Wiley and I live in Victorville. I have lived in the Mojave Desert for over 45 years and in that time I have learned much about our beautiful desert. For those that have not spent time in the Mojave Desert I want to point out how spectacular it is with mountains over 7,000 high, large sand dunes, the worlds largest Joshua tree forest, seeps and springs, and beautiful vistas.

30-10

I am here today to oppose the Soda Mountains Solar Project for many reasons, both environmental and economic. The major problem with this proposed project is the siting. This is right on the border of the Mojave National Preserve and will ruin the view shed both from the park and from the freeway. This is a bighorn sheep area and will destroy the habitat and the connective of the sheep. Water is also an issue. This is very close to the Zzyzx Study Center (where the Mojave Tui Chub lives) and Soda Dry Lake. Even the Mojave National Preserve opposes this location as hampering their ability to protect the natural resources of the park.

30-11

30-12

Many visitors come to this park every year to enjoy it's unique beauty, quiet and solitude, spacious vistas, mountains and wildlife. They come for the many recreational activities offered including camping, hiking, backpacking, touring, hunting, botanizing, horseback riding and visiting historic sites. Tourist will not be eager to visit a landscape of solar panels, and a land devoid of plants and wildlife.

30-13

Thank you for this opportunity to speak.

Carol Wiley

Comment Letter 30

15457 Eto Camino Rd
Victorville, CA 92394
January 8, 2014

Congressman Paul Cook
Bureau of Land Management
California Energy Commissioners
San Bernardino County Supervisors

I am a longtime resident of the Mojave Desert and have learned a lot about the precious resources here and in the Mojave National Preserve in particular. I am opposed to the Soda Mountains Solar Project because of the horrible impacts to the Mojave Preserve and the priceless areas around it. This is a horrible location for such a project. It will greatly impact the view shed, the big horn sheep and their migration corridors, the desert tortoise, the water in the area and the wilderness value of the Soda Mountains. 30-14

Tourists visit the desert for the beautiful vistas, solitude and quiet and wildlife. Visitors will not want to come to visit solar projects.

This project is not necessary. Industrial size projects should be close to where the power is needed and roof top solar should be the priority. 30-15

(over)

Please consider the damage this project will inflict on the precious Mojave Desert and look to a better solution.

30-15 cont.

Sincerely,

Carol A. Wiley

Comment Letter 31

CENTER for BIOLOGICAL DIVERSITY
Because life is good.
protecting and restoring natural ecosystems and imperiled species through science, education, policy, and environmental law
via email and USPS

2/7/2014

Jeff Childers
Soda Mountain Solar Project Manager
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553
sodamtnsolar@blm.gov
jchilders@blm.gov

RE: Request for 60 day extension to comment deadline on the Draft EIS/R for the Soda Mountain Solar Project

Dear Mr. Childers,

On behalf of the Center for Biological Diversity's more than 675,000 members and on-line activists, I am writing to request that an additional 60 days be added to the public comment period for the Soda Mountain Solar Draft Environmental Impact Statement and Report (DEIS/R). The DEIS/R is close to 2000 pages including the appendices and not all of the relevant reports cited in the document are available in it. The current 90-day comment period requires tracking down data and reports that were not provided in the DEIR/S, reading and checking numerous pages, digesting them and ultimately formulating detailed comments. The complexity of the project site and its impact on the threatened desert tortoise, and other rare desert wildife as well as its adjacency to existing conservation investments makes this project controversial at best and likely very impactful to the heart of the greater Mojave ecosystem. Additional time for comments enables the public to bring forth scientific facts that will provide the decisionmakers with additional information upon which to base a decision. Therefore, we request that the comment period be extended for an additional 60 days for a full 150 days of public comment opportunity.

31-1

Respectfully submitted,

Ileene Anderson

Arizona • California • Nevada • New Mexico • Alaska • Oregon • Washington • Illinois • Minnesota • Vermont • Washington, DC

Ileene Anderson, Senior Scientist
8033 Sunset Boulevard, #447 • Los Angeles, CA 90046-2401
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www.BiologicalDiversity.org

CENTER *for* BIOLOGICAL DIVERSITY

VIA ELECTRONIC MAIL AND U.S. MAIL

March 3, 2014

Jeffery Childers
Soda Mountain Solar Project Manager
Bureau of Land Management
California Desert District Office
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553
sodamtnsolar@blm.gov

Re: Comments on Soda Mountain Solar Project Draft Plan Amendment/Environmental Impact Statement/Environmental Impact Report CACA#049584

Dear Project Manager Childers:

These comments are submitted on behalf of the Center for Biological Diversity's 675,000 staff, members and on-line activists in California and throughout the nation, regarding the Soda Mountain Solar Project Draft Plan Amendment/Environmental Impact Statement/Environmental Impact Report CACA#049584 ("proposed project"), issued by the Bureau of Land Management ("BLM"). The Center submitted joint scoping comments with other conservation organizations on December 14, 2012. We incorporate by reference those comments here.

The development of renewable energy is a critical component of efforts to reduce greenhouse gas emissions, avoid the worst consequences of global warming, and to assist California in meeting emission reductions. The Center for Biological Diversity (the "Center") strongly supports the development of renewable energy production, and the generation of electricity from solar power, in particular. However, like any project, proposed solar power projects should be thoughtfully planned to minimize impacts to the environment. In particular, renewable energy projects should avoid impacts to sensitive species and habitats, and should be sited in proximity to the areas of electricity end-use in order to reduce the need for extensive new transmission corridors and the efficiency loss associated with extended energy transmission. Only by maintaining the highest environmental standards with regard to local impacts, and effects on species and habitat, can renewable energy production be truly sustainable.

31-2

The proposed project right of way includes 4,179 acres of public lands,the proposed project construction and operation would disturb approximately 2,557 acres, and the final footprint would permanently disturb approximately 2,222 acres of public lands (DEIS/R at PDF page 18, 20). The proposed project also includes a substation and switchyard for interconnection to the existing transmission system and the realignment of Rasor Road.

31-3

Arizona • California • Nevada • New Mexico • Alaska • Oregon • Montana • Illinois • Minnesota • Vermont • Washington, DC

Lisa T. Belenky •Senior Attorney • 351 California St., Suite 600 •San Francisco, CA 94104
tel: (415) 436.9682 ext. 307 *fax:* (415) 436.9683 lbelenky@biologicaldiversity.org *www.BiologicalDiversity.org*

These lands, located in the heart of the Mojave Desert, provide habitat for many species including the threatened desert tortoise, the iconic desert bighorn sheep, imperiled Mojave fringe-toed lizard, declining burrowing owl, desert golden eagle and many others (DEIS/R at PDF pages 221-232). The DEIS/R for the proposed plan amendment and right-of-way application fails to provide adequate identification and analysis of all of the significant impacts of the proposed project on the desert tortoise, the Mojave fringe-toed lizard, golden eagles, migratory birds, desert bighorn, other biological resources and water resources; fails to adequately address the significant cumulative impacts of the project; and lacks consideration of a reasonable range of alternatives including an alternatives that would avoid impacts to intact lands and habitat such as distributed energy in the LA basin and elsewhere or alternatives that would reduce or eliminate impacts to rare species, connectivity corridors for wildlife and water resources.

31-3 cont.

Of particular concern is the BLM's failure to include adequate information regarding the impacts to resources and the failure to fully examine the impact of the proposed plan amendment to the California Desert Conservation Act Plan ("CDCA Plan") along with other similar proposed plan amendments. Outside of the No Action alternatives, the DEIS/R fails to consider potential alternative plan amendments that would protect the most sensitive lands from future development as required by the Solar PEIS. Alternative siting at another location and alternative technologies (including distributed PV) should have been fully considered in the DEIS/R, because they could significantly reduce the impacts to many species, habitats and water resources in the heart of the Mojave Desert directly adjacent to the Mojave National Preserve.

Although the proposed project area is currently within an identified "variance area" established in the BLM's solar PEIS, it purportedly is not subject "variance" review, because it was a so-called "pending" application. The Center opposed the adoption of overly broad variance areas based on the unproven need for additional areas outside of the Solar Energy Zones identified in the Solar PEIS and opposed allowing so-called "pending" applications to be treated differently than other projects after the PEIS was adopted. The fact remains that variance areas have intrinsically important natural values that make development in these areas less preferable than in the Solar Energy Zones. The Center remains concerned that this proposal threatens to undermine the "bioregional" approach in the CDCA Plan as a whole as well as violate the fundamental planning principles of FLPMA.

31-4

In our joint scoping comments on the DEIS/R, the Center and others raised concerns about the impacts that development at this location would have on sensitive species and habitats and to connectivity and water resources. As the Center has emphasized in our comments on the various large-scale industrial solar proposals in the California desert, planning should be done *before* site specific projects are approved in order to ensure that resources are adequately protected from sprawl development and project impacts are avoided, minimized and mitigated. In this case, although the planning in the PEIS has now been completed, and this project is a variance area, BLM's failure to apply current planning decisions—including analyzing projects under "variance lands" review —to this project undermines the PEIS and other bioregional

planning. (DEIS/R at PDF page 69). The BLM's failure to properly analyze this project in light of current planning undermines the intent of the PEIS and the CDCA Plan as a whole as rational planning principles. 31-4 cont.

In the sections that follow, the Center provides detailed comments on the ways in which the DEIS/R fails to adequately identify and analyze many of the impacts that could result from the proposed project, including but not limited to: impacts to biological resources, impacts to water resources, impacts to soils, and cumulative impacts. The DEIS is also inaccurate in its discussion of the governing land use plan—the West Mojave Plan amendment to the CDCA Plan ((DEIS/R at 3.3-17, PDF 186; wrongly stating that there is an HCP in place). This calls into serious question whether BLM has actually taken a hard look at the environmental impacts or considered the projects consistency with the actual West Mojave Plan amendments as required by FLMPA and NEPA. 31-5, 31-6

I. The BLM's Analysis of the Proposed Plan Amendment and Proposed Project Fails to Comply with FLPMA.

As part of FLPMA, Congress designated 25 million acres of southern California as the California Desert Conservation Area ("CDCA"). 43 U.S.C. § 1781(c). Congress declared in FLPMA that the CDCA is a rich and unique environment teeming with "historical, scenic, archaeological, environmental, biological, cultural, scientific, educational, recreational, and economic resources." 43 U.S.C. § 1781(a)(2). Congress found that this desert and its resources are "extremely fragile, easily scarred, and slowly healed." *Id.* In light of the threats to the unique and fragile resources of the CDCA, Congress determined that special management was needed for this area and among the purposes of designating this area was "to provide for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple use and sustained yield, and the maintenance of environmental quality." 43 U.S.C. § 1781(b).

As part of FLPMA, Congress expressly required the development of a land management plan for the CDCA by a date certain (43 U.S.C. § 1781(d)). The CDCA Plan was first adopted by BLM in 1980. For the CDCA and other public lands, Congress mandated that the BLM "shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C § 1732(b). 31-7

The proposed project is sited on federal public lands managed by the BLM within the CDCA, and will directly, indirectly and cumulatively impact lands within the CDCA including lands within one-half mile of the Mojave National Preserve (DEIS/R at PDF page 171). Under the CDCA plan as amended by the West Mojave Plan amendment ("WEMO"), the project requires a plan amendment before the proposed project can be approved by the land management agency, the BLM. The DEIS/R misrepresents the WEMO Plan amendment – which is a BLM plan amendment to the CDCA Plan. The HCP that was under development was never adopted as an by any county or approved by FWS. (DEIS/R at 3.3-17, PDF 186). BLM must fully and

accurately consider whether the proposed plan amendment would be consistent with the West Mojave Plan amendment to the CDCA Plan – the DEIS does not show that it has done so to date. 31-7 cont.

While the DEIS/R correctly recognizes that plan amendments would be required if the proposed project was to move forward – for the solar facility – we failed to find language for the plan amendment relating to any of the alternatives, including the preferred alternative. Based on the lack of proposed plan amendment language, the DEIS/R fails to provide adequate information on the alternatives including the preferred alternative and must be revised and recirculated. 31-8

The BLM also failed to take a comprehensive look at the proposed plan amendment for the ROW to determine: 1) whether an industrial scale project is appropriate for any of the public lands in this area; 2) if so, how much of the public lands are suitable for such industrial uses given the need to balance other management goals including preservation of habitat and water resources; and 3) the location of the public lands suitable for such uses.

As the BLM is well aware, the Center has repeatedly sought stronger protections for species and habitats throughout the CDCA as a whole and specifically within the West Mojave planning area. Clearly a more robust strategy for conservation is required if BLM is going to consider approval of an industrial solar project within the CDCA covering thousands of acres when this scale of impacts was never contemplated in the CDCA planning or the West Mojave bioregional plan. 31-9

In addition, as the DEIS/R acknowledges, the preferred alternative will result in air quality impacts, which is inconsistent with the Class L and M lands designation to protect air quality and visibility (DEIS/R at PDF pg 30). Given the impact of the proposed project on other multiple uses of these public lands at the proposed site as well as other aspects of the bioregional planning, it is clear that BLM may also need to amend other parts of the plan as well and should have looked at additional and/or different amendments as part of the alternatives analysis. 31-10

A. BLM Fails to Adequately Address the Effects on Ongoing Planning for the Desert Renewable Energy Conservation Plan (DRECP)

The DEIS/R fails to adequately address the proposed project in the context of the ongoing DRECP planning process for solar development in the California desert, for which BLM is a guiding agency. Of particular concern is the failure of the DEIS/R to analyze the impacts of the proposed project on the goals and objectives for species under the DRECP, particularly avian species, desert kit fox, desert tortoise, desert bighorn and other species, and movement corridors that would result from the approval of this and other projects in the area. Such analysis *after the fact* is not consistent with the planning requirements of FLPMA or, indeed, any rational land use planning principles. 31-11

B. BLM Failed to Inventory the Resources of these Public Lands Before Making a Decision to Allow Destruction of those Resources

FLPMA states that "[t]he Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values," and this "[t]his inventory shall be kept current so as to reflect changes in conditions and to identify new and emerging resource and other values." 43 U.S.C. § 1711(a). FLPMA also requires that this inventory form the basis of the land use planning process. 43 U.S.C. § 1701(a)(2). *See Center for Biological Diversity v. Bureau of Land Management*, 422 F.Supp.2d 1115, 1166-67 (N.D. Cal. 2006) (discussing need for BLM to take into account known resources in making management decisions); *ONDA v. Rasmussen,* 451 F.Supp. 2d 1202, 1212-13 (D. Or. 2006) (finding that BLM did not take a hard look under NEPA by relying on outdated inventories and such reliance was inconsistent with BLM's statutory obligations to engage in a continuing inventory under FLPMA). It is clear that BLM should not approve a management plan amendment based on outdated and inadequate inventories of affected resources on public lands. 31-12

As detailed below in the NEPA sections, here BLM has failed to compile an adequate inventory of the resources of the public lands that could be affected by the proposed project *before* preparing the DEIS/R (including, e.g., rare plants, golden eagle surveys, migratory bird surveys and other biological resources) which is necessary in order to adequately assess the impacts to resources of these public lands in light of the proposed plan amendment. The DEIS/R indicates that plant and wildlife surveys were initiated in 2009 on the project site, but most of the surveys were of too short duration to draw conclusions about site resources – a single year – or two non-sequential years – basically resulting in a "snapshot in time" of existing biological resources, not comprehensive data sets. The inadequacies of the surveys are particularly problematic given the controversy regarding this proposed project site in the heart of the Mojave and adjacent to the Mojave National Preserve.

BLM has also failed to adequately analyze impacts on known resources therefore, at minimum, a revised or supplemental DEIS must be prepared to include several categories of additional information including more comprehensive survey data about the biological resources of the site and potential impacts of the project on those resources of our public land and water, and that document must be circulated for public review and comment. 31-13

C. The DEIS Fails to Provide Adequate Information to Ensure that the BLM will Prevent Unnecessary and Undue Degradation of Public lands

FLPMA requires BLM to "take any action necessary to prevent unnecessary or undue degradation of the lands" and "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." 43 U.S.C. §§ 1732(b), 1732(d)(2)(a). Without adequate information and analysis of the current status of the resources of these public lands, BLM cannot fulfill its duty to prevent unnecessary or undue degradation of the public lands and resources. Thus, the failure to provide an adequate current inventory of resources and environmental review undermines BLM's ability to protect and manage these lands in accordance with the statutory directive. 31-14

BLM has failed to properly identify and analyze impacts to the resources from all of the project components including, for example, the impacts of thousands of acres of PV panels on avian species. As detailed below, the BLM's failure in this regard violates the most basic requirements of NEPA and in addition undermines the BLM's ability to ensure that the proposal does not cause unnecessary and undue degradation of public lands. *See Island Mountain Protectors*, 144 IBLA 168, 202 (1998) (holding that "[t]o the extent BLM failed to meet its obligations under NEPA, it also failed to protect public lands from unnecessary or undue degradation."); *National Wildlife Federation*, 140 IBLA 85, 101 (1997) (holding that "BLM violated FLPMA, because it failed to engage in any reasoned or informed decisionmaking process" or show that it had "balanced competing resource values"). 31-14 cont.

II. The DEIS Fails to Comply with NEPA.

NEPA is the "basic charter for protection of the environment." 40 C.F.R. § 1500.1(a). In NEPA, Congress declared a national policy of "creat[ing] and maintain[ing] conditions under which man and nature can exist in productive harmony." *Or. Natural Desert Ass'n v. Bureau of Land Mgmt.,* 531 F.3d 1114, 1120 (9th Cir. 2008) (quoting 42 U.S.C. § 4331(a)). NEPA is intended to "ensure that [federal agencies] … will have detailed information concerning significant environmental impacts" and "guarantee[] that the relevant information will be made available to the larger [public] audience." *Blue Mountains Biodiversity Project v. Blackwood,* 161 F.3d 1208, 1212 (9th Cir. 1998).

Under NEPA, before a federal agency takes a "'major [f]ederal action[] significantly affecting the quality' of the environment," the agency must prepare an environmental impact statement (EIS). *Kern v. U.S. Bureau of Land Mgmt.,* 284 F.3d 1062, 1067 (9th Cir. 2002) (quoting 43 U.S.C. § 4332(2)(C)). "An EIS is a thorough analysis of the potential environmental impact that 'provide[s] full and fair discussion of significant environmental impacts and … inform[s] decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.'" *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.,* 387 F.3d 989, 993 (9th Cir. 2004) (citing 40 C.F.R. § 1502.1). An EIS is NEPA's "chief tool" and is "designed as an 'action-forcing device to [e]nsure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government.'" *Or. Natural Desert Ass'n,* 531 F.3d at 1121 (quoting 40 C.F.R. § 1502.1). 31-15

An EIS must identify and analyze the direct, indirect, and cumulative effects of the proposed action. This requires more than "general statements about possible effects and some risk" or simply conclusory statements regarding the impacts of a project. *Klamath Siskiyou Wildlands Center v. BLM,* 387 F.3d 989, 995 (9th Cir. 2004) (citation omitted); *Oregon Natural Resources Council v. BLM,* 470 F.3d 818, 822-23 (9th Cir. 2006). Conclusory statements alone "do not equip a decisionmaker to make an informed decision about alternative courses of action or a court to review the Secretary's reasoning." *NRDC v. Hodel*, 865 F.2d 288, 298 (D.C. Cir. 1988).

NEPA also requires BLM to ensure the scientific integrity and accuracy of the information used in its decision-making. 40 CFR § 1502.24. The regulations specify that the agency "must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential." 40 C.F.R. § 1500.1(b).

Where there is incomplete information that is relevant to the reasonably foreseeable impacts of a project and essential for a reasoned choice among alternatives, the BLM must obtain that information unless the costs of doing so would be exorbitant or the means of obtaining the information are unknown. 40 C.F.R. § 1502.22. Here the costs are reasonable to obtain information needed to complete the analysis and the BLM must provide additional information in a revised DEIS/R. Even in those instances where complete data is unavailable, the DEIS/R also must contain an analysis of the worst-case scenario resulting from the proposed project. *Friends of Endangered Species v. Jantzen*, 760 F.3d 976, 988 (9th Cir. 1985) (NEPA requires a worst case analysis when information relevant to impacts is essential and not known and the costs of obtaining the information are exorbitant or the means of obtaining it are not known) *citing Save our Ecosystems v. Clark*, 747 F.2d 1240, 1243 (9th Cir. 1984); 40 C.F.R. § 1502.22. 31-15 cont.

Here, there is incomplete information in several relevant areas and BLM has not shown that it cannot be obtained. Therefore, BLM must obtain additional information, provide additional analysis, and revise and recirculte the DEIS/R.

A. Purpose And Need and Project Description are Too Narrowly Construed and Unlawfully Segment the Analysis

Agencies cannot narrow the purpose and need statement to fit only the proposed project and then shape their findings to approve that project without a "hard look" at the environmental consequences. To do so would allow an agency to circumvent environmental laws by simply "going-through-the-motions." It is well established that NEPA review cannot be "used to rationalize or justify decisions already made." 40 C.F.R. § 1502.5; *Metcalf v. Daley*, 214 F.3d 1135, 1141-42 (9th Cir. 2000) ("the comprehensive 'hard look' mandated by Congress and required by the statute must be timely, and it must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made.") As Ninth Circuit noted an "agency cannot define its objectives in unreasonably narrow terms." *City of Carmel-by-the-Sea v. U.S. Dept. of Transportation*, 123 F.3d 1142, 1155 (9th Cir. 1997); *Muckleshot Indian Tribe v. U.S. Forest Service*, 177 F. 3d 900, 812 (9th Cir. 1999). The statement of purpose and alternatives are closely linked since "the stated goal of a project necessarily dictates the range of 'reasonable' alternatives." *City of Carmel*, 123 F.3d at 1155. The Ninth Circuit recently reaffirmed this point in *National Parks Conservation Assn v. BLM*, 586 F.3d 735, 746-48 (9th Cir. 2009) (holding that "[a]s a result of [an] unreasonably narrow purpose and need statement, the BLM necessarily considered an unreasonably narrow range of alternatives" in violation of NEPA). 31-16

The purpose behind the requirement that the purpose and need statement not be unreasonably narrow, and NEPA in general is, in large part, to "guarantee[ ] that the relevant information will be made available to the larger audience that may also play a role in both the decision-making process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). The agency cannot camouflage its analysis or avoid robust public input, because "the very purpose of a draft and the ensuing comment period is to elicit suggestions and criticisms to enhance the proposed project." *City of Carmel-by-the-Sea*, 123 F.3d at 1156. The agency cannot circumvent relevant public input by narrowing the purpose and need so that no alternatives can be meaningfully explored or by failing to review a reasonable range of alternatives.

31-16 cont.

The DEIS/R states "The BLM's purpose and need for the Project is to respond to the Applicant's application under Title V of the FLPMA (43 USC §1761(a)(4)) for a ROW grant to construct, operate, maintain, and decommission a solar PV facility on public lands in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws." (DEIS/R at PDF page 66). BLM's purpose and need is very narrowly construed to the proposed project itself and amendment to the Plan *for the project only*. The purpose and need provided in the DEIS/R is impermissibly narrow under NEPA for several reasons, most importantly because it foreclosed meaningful alternatives review in the NEPA documents. Because the purpose and need and the alternatives analysis are at the "heart" of NEPA review and affect nearly all other aspects of the EIS, on this basis and others, BLM must revise and re-circulate the DEIS/R.

In its discussion of the need for renewable energy production the DEIS/R fails to address risks associated with global climate change in context of including both the need for climate change mitigation strategies (e.g., reducing greenhouse gas emissions) and the need for climate change adaptation strategies (e.g., conserving intact wild lands and the corridors that connect them). All climate change adaptation strategies underline the importance of protecting intact wild lands and associated wildlife corridors as a priority adaptation strategy measure.

31-17

The habitat fragmentation, loss of connectivity for terrestrial wildlife, risks to avian species, possible introduction of increasing predation on adjacent resources, and introduction of invasive weed species associated with the proposed project in the proposed location may run contrary to an effective climate change adaptation strategy. Siting thousands of acres of photovoltaic panels in the proposed location could impact avian species proximate to desert flyways and stopovers at the Zzyzx Springs, occupied habitat for rare species and important habitat linkage areas, major washes and other fragile desert resources, could undermine a meaningful climate change adaptation strategy with a poorly executed climate change mitigation strategy. Moreover, although the DEIS/R recognizes that the proposed construction and operation will produce greenhouse gases, but we could not find an analysis of the green house gas production for alternatives other than the preferred alternative. Of concern is the failure to analyze Alternative F which would require trucking water to the site, which could potentially greatly increase the greenhouse gas production of the project. The DEIS/R also assumes that fossil fuel based energy production will cease somewhere, but fails to identify which fossil-fuel

31-18

based project(s) will be shuttered. Regardless, the way to maintain healthy, vibrant ecosystems is not to fragment them, block connectivity corridors, or reduce their biodiversity. 31-18 cont.

B. The DEIS Does Not Adequately Describe Environmental Baseline

BLM is required to "describe the environment of the areas to be affected or created by the alternatives under consideration." 40 CFR § 1502.15. The establishment of the baseline conditions of the affected environment is a practical requirement of the NEPA process. In *Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988), the Ninth Circuit states that "without establishing . . . baseline conditions . . . there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA." Similarly, without a clear understanding of the current status of these public lands BLM cannot make a rational decision regarding proposed project. *See Center for Biological Diversity v. U.S. Bureau of Land Management, et al.*, 422 F. Supp. 2d 1115, 1166-68 (N.D. Cal. 2006) (holding that it was arbitrary and capricious for BLM to approve a project based on outdated and inaccurate information regarding biological resources found on public lands).

The DEIS/R fails to provide adequate baseline information and description of the environmental setting in many areas including in particular the status of rare plants, animals, and natural communities including bighorn sheep, golden eagles, migratory birds, rare plants, and others, or sufficient baseline information on water resources and hydrology. 31-19

The baseline descriptions in the DEIS/R are inadequate particularly because the existing condition of this remote desert valley is a fully functioning ecosystem with very little disturbance that is headwaters of a watershed that drains into the Mojave National Preserve. As discussed below, because of the deficiencies of the baseline data for the proposed project area, the DEIS/R fails to adequately describe the environmental baseline. Many of the rare and common species and habitats have incomplete and/or vague on-site descriptions that make determining the proposed project's impacts difficult at best. Some of the rare species/habitats baseline conditions are totally absent, therefore no impact assessment is provided either. The DEIS/R fails to include many species of concern that have been documented adjacent to the project site and are mobile enough to use the project site. A supplemental or revised document is required to fully identify the baseline conditions of the site, and that baseline needs to be used to evaluate the impacts of the proposed project.

C. Failure to Identify and Analyze Direct and Indirect Impacts to Biological Resources

The DEIS/R fails to adequately analyze the direct, indirect, and cumulative impacts of the proposed project on the environment. The Ninth Circuit has made clear that NEPA requires agencies to take a "hard look" at the effects of proposed actions; a cursory review of environmental impacts will not stand. *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150-52, 1154 (9th Cir. 1998). Where the BLM has incomplete or insufficient information, 31-20

NEPA requires the agency to do the necessary work to obtain it where possible. 40 C.F.R. §1502.22; *see National Parks & Conservation Ass'n v. Babbitt,* 241 F.3d 722, 733 (9th Cir. 2001) ("lack of knowledge does not excuse the preparation of an EIS; rather it requires [the agency] to do the necessary work to obtain it.")

Moreover, BLM must look at reasonable mitigation measures to avoid impacts in the DEIS/R but failed to do so here. Even in those cases where the extent of impacts may be somewhat uncertain due to the complexity of the issues, BLM is not relieved of its responsibility under NEPA to discuss mitigation of reasonably likely impacts at the outset. Even if the discussion may of necessity be tentative or contingent, NEPA requires that the BLM provide some information regarding whether significant impacts could be avoided. *South Fork Band Council of Western Shoshone v. DOI*, 588 F.3d 718 , 727 (9th Cir. 2009).

The lack of adequate surveys is particularly problematic. Failure to conduct sufficient surveys prior to consideration of the project application also effectively eliminates the most important function of surveys - using the information from the surveys to properly site projects, minimize harm caused by the project and reduce the need for mitigation. Often efforts to mitigate harm are far less effective than preventing the harm in the first place. In addition, without understanding the scope of harm before it occurs, it is difficult to quantify an appropriate amount and type of mitigation and impossible to comply with NEPA or FLPMA. 31-20 cont.

These types of industrial-scale projects when sited in undisturbed ecologically-functioning landscapes are essentially large-scale experiments[1]. If such projects move forward (which we oppose in this case), much can and should be learned from them through monitoring and adaptive management. The DEIS/R fails to adequately identify all of the on-site resources, evaluate the impacts to those resources and/or propose adequate mitigation or assure adequate monitoring for adaptive management to occur. While the project proponent had ample time to perform comprehensive surveys, for many species only a single surveys window was completed. For example, avian point counts were only done in the spring and fall of 2009 (DEIS/R Vol 2. at PDF page 17). Based on increasing concerns about solar project impacts on migratory birds, this single year effort is inadequate.

Even if mitigation had been properly addressed and assessed, which it has not been, the generalized strategy of "nesting" mitigation for a multitude of species – migratory/ special status species birds, bats, badger, kit fox, and rare plants in the mitigation for desert tortoise habitat will only partially work if the mitigation lands actually support the species. Even when "mitigation" habitat is already inhabited by the same species for which mitigation is sought, this mitigation strategy ensures a *net decrease* in habitat for impacted species. To actually provide mitigation that staunches species' habitat losses, the ratio must be much greater than 1:1[2] A *minimum* 3:1 mitigation should be required for the disturbance based on the number of sensitive species that currently use project site, including the threatened desert tortoise, to assure that the project 31-21

[1] Lovich & Ennen 2011
[2] Moilen et al. 2008, Norton 2008

impacts are mitigated appropriately and that the net losses of habitat for rare species are prevented. However, it is important to note that even at 3:1 or higher, the connectivity for certain species including desert bighorn sheep may not able to be truly mitigated by securing protected habitat elsewhere—it is the location of this habitat that is critical to provide connectivity and this has not been adequately addressed. Adequate mitigation for impacts is essential to conserve listed species and also to prevent future listings under Endangered Species Acts – both state and federal. 31-21 cont.

1. Desert Tortoise

The desert tortoise has lived in the western deserts for tens of thousands of years. In the 1970's their populations were noted to decline. Subsequently, the species was listed as threatened by the State of California in 1989 and by the U.S. Fish and Wildlife Service in 1990, which then issued a Recovery Plan for the tortoise in 1994. The U.S. Fish and Wildlife Service is updated the Recovery Plan in 2011. Current data indicate a continued decline across the range of the listed species[3] despite its protected status and recovery actions.

In past surveys of the project site for desert tortoise, little recent desert tortoise sign was found on the proposed project site, and desert tortoise were likely to inhabit the site at very low densities. However, the proposed project is now not in compliance with USFWS' guidance on desert tortoise survey methodology, which states "USFWS considers the results of a pre-project survey to be valid for no more than one year."[4] The most recent surveys were done in fall of 2012, while the other survey was done in spring of 2009 (DEIS/R Vol 2. at PDF page 17). The project site it located in the West Mojave Recovery Unit of the desert tortoise – a recovery unit that generally is in steep decline. Since range-wide monitoring was established in 2001, this recovery unit has steadily declined. From the baseline established between 2001-2005, the desert tortoise population had declined by 23% in the Western Mojave by 2007[5] with densities estimated at 4.7 tortoises/km^2. The draft analysis from the 2012 Rangewide Monitoring calculates only 3.6 tortoises/km^2 in Western Mojave Recovery unit[6] – an approximate 25% decrease in the five years since 2007. These significant declines are occurring almost twenty years *after* the species was placed under Endangered Species Act protection. 31-22

Despite these declines, the proposed project is being sited in occupied desert tortoise habitat. No alternative sites are even considered in the DEIS/R that would avoid these impacts although avoidance is practicable and should have been considered. The failure to consider alternative project locations is particularly egregious in this case, because even with later compensatory mitigation, this habitat will be lost forever. 31-23

[3] USFWS 2012
[4] USFWS 2009a
[5] USFWS 2009b
[6] USFWS 2012

The DEIS/R proposal is to move all on-site desert tortoise through relocation or translocation. The desert tortoise translocations document[7] an unacceptable 44% confirmed mortality of translocated desert tortoise on a project where the translocation occurred 2008 and the last surveys in 2009. Thirty-five additional tortoises (22%) were "missing" – status unknown. Coupled with that, all translocated tortoise had tested negative for deadly diseases prior to being translocated, but post-translocation, 11% tested positive, setting up a tragic epidemiological situation. While translocation efforts allow for survival of some desert tortoise, in the case of the proposed project, moving the tortoise out of immediate harms way by moving them nearby (and even perhaps within part of their historic "home range"), will likely still result in long-term demise of the animals because of the industrialization of the proposed project site. Therefore, to actually determine the outcome of the translocation over time, a mitigation measure needs to be added as part of the requirement for the Desert Tortoise Translocation Plan:

- Monitoring of all of the translocated tortoises or desert tortoise moved as part of this project will continue annually throughout the life of the Soda Mountains Solar Project.

This request follows the guidance provided by the Independent Science Advisors convened for the Desert Renewable Energy Conservation Plan (DRECP), who produced Recommendations for the DRECP in 2010. In that document they state "Transplantation or translocations should be considered a last recourse for unavoidable impacts, should never be considered full mitigation for the impact, and in all cases must be treated as experiments *subject to long-term monitoring and management*.[Emphasis added] [8]. 31-24

The translocation site should be conserved in perpetuity, so that moving animals out of harm's way for one project precludes the eventuality of having to move them for a second time when another project is proposed in the area. This is especially important for this proposed project which is located in a transmission corridor and which may have future development in it. We recommend that the proposed project area be evaluated as an Area of Critical Environmental Concern because of the biological resources and connectivity that is provides between conserved lands to the west and the Mojave National Preserve to the east. Indeed, the situation of moving desert tortoise repeatedly is occurring as desert tortoise that were moved off-site of the Ivanpah Solar Electric Generating System site, may now be moved a second time if the Stateline Solar project is moves as currently permitted[9]. The more times an animal is moved out of its existing home range, the less likely it is to survive. Therefore, the translocation areas, or areas where relocated or translocated plant/animals reside should be put off limits to all future development. An additional mitigation measure should be incorporated as part of the requirement for the Desert Tortoise Translocation Plan:

- Areas where relocated or translocated desert tortoise reside will be conserved in perpetuity to provide a safe refugia for tortoise moved from the project site and

[7] Gowan and Berry 2010.
[8] ISA 2010 at vii
[9] Attachment 1. Figure 8 Tortoise Records ISEGS Monitoring Project and Perimeter Recipient Sites.

preclude the need for the desert tortoises to be moved more than once via the establishment of an Area of Critical Environmental Concern.

NEPA mandates consideration of the relevant environmental factors and environmental review of "[b]oth *short- and long-term* effects" in order to determine the significance of the project's impacts. 40 C.F.R. § 1508.27(a) (emphasis added). BLM has clearly failed to do so in this instance with respect to the impact to the desert tortoise. 31-24 cont.

Despite the cumulative impacts analysis for desert tortoise, without changes to the proposed project and full consideration of alternatives first, and then the development of a mitigation strategy as listed above and a higher mitigation ratio overall, the proposed mitigation does not even approach a guarantee of adequate compensation for the impacts to onsite desert tortoises or their habitat. 31-25

While Mitigation Measure 3.4-2b requires a Desert Tortoise Relocation/Translocation Plan (DEIS/R at PDG page 39), no desert tortoise relocation/translocation plan was included in the DEIS/R. The translocation plan should be included for public review as part of revised DEIS/R in order for the public and decision makers to be able to evaluate the effectiveness of the proposed strategies. 31-26

2. *Desert Bighorn Sheep*

The DEIS/R recognizes that the project site is occupied habitat for desert bighorn sheep (DEIS/R at PDF page 230). However it fails to adequately evaluate the impacts to the species from loss of habitat/foraging area and crucial connectivity. Despite the fact that the DEIS/R cites the Epps et al. (2013) paper entitled *Potential impacts of proposed solar energy development near the South Soda Mountains on desert bighorn sheep connectivity* it fails to include the scientists' conclusion which clearly states that "the intensity of development within such solar arrays would likely prevent movement of bighorn sheep through project areas" (at pg.1). Epps et al. also states that connectivity needs to be restored either by 1) improving the existing underpasses under Interstate 15 and enticing the bighorn to use them or 2) constructing an overpass for them. Additionally the paper states "the North-South Soda Mountain connection is *the most important restorable corridor* for long-term demographic potential (i.e., population recolonization by ewes) across the entire southeastern Mojave Desert of California, as it would provide *the best and only opportunity* for movement between bighorn populations in the Mojave National Preserve and the large complex of populations to the north of Interstate 15, and would facilitate gene flow as well resulting in long-term (multi-step) connections with bighorn sheep populations in Death Valley National Park" (at pg. 1 – emphasis added). The DEIS/R does not accurately reflect this information and must be revised. 31-27

The DEIS/R also fails to analyze the implication of the proposed project that could doom the entire southeastern desert bighorn populations to increased isolation,especially the herds in the Mojave National Preserve, in addition to increased habitat loss. The DEIS/R also fails to evaluate this key issue as part of a climate change adaptation strategy for the bighorn.

The desert bighorn herds in the Mojave National Preserve have recently sustained tragic population losses from pneumonia sweeping through them, introduced by domestic stock.[10] Over 100 desert bighorn have died between May and November 2013 alone.[11] While isolation of the Mojave National Preserve herds may have kept the disease from spreading desert wide, the re-establishment of those herds would be greatly benefitted by greater connectivity with herds outside off the Preserve, and maintenance of a robust genetics that on-the-ground connectivity would facilitate will benefit these herds desert-wide.

31-27 cont.

We agree with the DEIS/R's determination that significant and unavoidable impacts to desert bighorn will occur if the proposed project area is developed (DEIS/R at PDF page 46). This result should be avoided, and the project proposal denied.

The proposed mitigation measures are ineffective and may create additional impacts that have not been fully considered. Mitigation Measure 3.4-3 in the DEIS/R proposes to provide "three and five (total) pre-fabricated bighorn sheep water guzzlers in the north Soda Mountains/Avawatz Mountains corridor and provide funding to refill them through the life of the project". We fail to see how this mitigates or minimizes impacts. And the DEIS/R failed to evaluate the potential adverse effects of these guzzlers on the bighorn population through increasing herd size inappropriately. The proposed project will decrease available habitat, and key low elevation forage areas and assure isolation of the population. Increasing herd size through additional artificial waters while reducing habitat and connectivity through project development will not serve the desert bighorn well. While we do not necessarily oppose providing artificial water to desert species in light climate change impacts, we are also concerned about the proposed location of any guzzlers based on the fact that both the Soda Mountains and Avawatz Mountains are Wilderness Study Areas (WSAs). If indeed guzzlers are contemplated, they should be placed outside the boundaries of the WSAs to preclude degradation of them and a full NEPA review is required to determine whether such guzzlers are needed and alternatives for siting considerd; the DEIS/R fails to provide that information and therefore is inadequate on this basis as well.

31-28

3. Mojave fringe-toed lizard/Sand dunes/Sand Transport System

Surveys indication that Mojave fringe-toed lizards were observed approximately 1,000 feet from the southwest corner of the South Array and also found in the southern Rasor Road realignment corridor (DEIS/R Vol 2, Appendix E at PDF page 52). The DEIS/R is unclear if the proposed project will affect this species either through direct impact or indirect impact of interference with sand transport corridor(s). A supplemental EIR needs to include these data and analyses.

31-29

[10] http://www.nps.gov/moja/naturescience/desert-bighorn-sheep.htm
[11] http://www.kcet.org/news/redefine/rewild/mammals/park-service-to-track-ailing-mojave-preserve-bighorn.html

Notably other public lands projects are required to mitigate for indirect impacts to occupied Mojave fringe-toed lizard habitat. For example, Desert Sunlight was required to mitigate any unavoidable impacts to the Mojave fringe-toed lizard habitat up to 0.5:1 for indirect impacts to all occupied Mojave fringe-toed lizard habitat (Desert Sunlight FEIS at 4.4-40). Also, the Desert Harvest project (Desert Harvest FEIS at Wil-4) is required to produce a Mojave Fringe-toed Lizard Protection Plan. This DEIS/R provide no consistency with BLM treatment of impacts to Mojave fringe-toed lizards on other projects. If in fact the project will in fact eventually eliminate the sand habitat for the Mojave fringe-toed lizard downwind of the proposed project site, downwind impacts should be considered a direct yet off-site impact. The DEIS/R fails to evaluate this important aspect. At minimum, if the missing analysis identifies permanent impacts may occur, they should be mitigated at the 3:1 level.

A more robust cumulative impacts analysis is also needed for the Mojave fringe-toed lizard that takes into account other recent impacts across the CDCA—including the unexpected high mortality of Mojave fringe-toed lizards found at the Colorado River substation[12]-- and both approved and proposed projects within its habitat throughout the CDCA.

31-29 cont.

5. Migratory and Other Avian Species

Overarching Issues Regarding Avian Species

Mounting evidence suggests that large-scale solar projects of all kinds, due to their possible appearance as lakes to birds, may be attracting birds in general and water birds in particular to the project sites, where mortalities occur when the birds run into panels/mirrors or water birds land and can not take off again due to lack of requisite water; or with power towers birds are burned or singed when crossing the flux field. The DEIS/R fails to consider alternatives to avoid or minimizing impacts to bird species that may result from putting thousands of acres of photovoltaic panels into the arid Mojave desert. Without a robust alternatives analysis and consideration of mitigation for this impact the DEIS/R is woefully inadequate.

31-30

Our experience from other projects indicates that the pre-construction avian point counts have no correlation to the actual species that die on the project sites. As mentioned above, very few water birds are documented in the preconstruction surveys at these sites – understandably so, since no open water is present on the site. That appears to be the case with the preconstruction avian point counts for this project (DEIS/R Vol 2, Appendix E at PDF page 97-111), where indeed no "waterbirds" were documented. However, data sources from nearby locations indicate a number of birds use the general area. For example Afton Canyon, located south of the proposed project site has documented 78 species of birds[13], including a number of "waterbirds", and Zzyzx Springs, located just north of the proposed project site has documented 224 species[14] including numerous "waterbirds" and potentially other federally and state listed species that the DEIS/R

[12] Helix 2013 Summary of MFTL monitoring during DPV2 construction
[13] http://ebird.org/ebird/ca/hotspot/L444756
[14] http://ebird.org/ebird/ca/hotspot/L350673

does not analyzed – for example, the southwestern willow flycatcher (see below species specific discussion). The DEIS/R needs to recognize ongoing avian mortality at the existing large-scale solar projects and broaden the scope of the avian surveys to species that migrate or transit the site that could be attracted to the project and impacted. While this is a relatively "new"-type of impact analysis, the amount of avian mortality for photovoltaic projects has been estimated for other projects[15] and should be a part of the NEPA analysis.

31-30 cont.

Yuma Clapper Rail

The Yuma clapper rail is a federally endangered species and a fully protected species under State law. The DEIS/R recognizes that the Yuma clapper rail (*Rallus longirostrus yumanensis*) mortality has occurred at the Desert Sunlight photovoltaic project (at 4.21-11).

The proposed project may pose a serious threat to the Yuma clapper rail, which is a secretive critically endangered bird. Recent data on populations near the project site indicate that between 1995 and 2005, survey data have ranged from 217-445 birds along the Lower Colorado River and the Salton Sea data has ranged from 234-523 birds[16], population numbers well below the Recovery Plan[17] objectives for this unique bird. While little is known about their migration or dispersal patterns, the recent Yuma clapper rail mortality at Desert Sunlight indicates that the birds use the desert areas for dispersal and indeed may be attracted to solar facilities through mistaking the solar facility as water – the "lake effect". In the case of the proposed project, the project infrastructure will pose a hazard to the rail.

31-31

Willow Flycatcher

The DEIS/R overlooks the presence of the willow flycatcher (*Empidonax trallii*) near the project site. The southwestern willow flycatcher is a federally and state endangered species. While the willow flycatcher has not been reported on the proposed project site, an willow flycatcher unidentified to species has been recorded very close to the site at Zzyzx Springs . According to eBird hotspot list, which is reviewed by local experts prior to posting, a willow flycatcher (*Empidonax* sp.) was documented using the resources at Zzyzx on September 22, 2012[18] and Afton Canyon also on April 14, 2012[19]. It is unclear if these birds are the federally protected southwestern willow flycatcher. However, southwestern willow flycatchers are known to migrate through the desert[20], and it is possible that the willow flycatcher at Zzyzx Springs was a southwestern. Regardless all willow flycatchers are state listed as endangered and protected under the MBTA as well. The BLM should consult with US Fish and Wildlife Service on impacts associated with the proposed project to the endangered southwestern willow flycatcher.

31-32

[15] http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-06C/TN201152_20131108T155000_Testimony_of_K_Shawn_Smallwood_PhD.pdf
[16] USFWS 2006
[17] USFWS 1983
[18] eBird – Zzyzx Springs Hot Spot http://ebird.org/ebird/ca/hotspot/L350673
[19] eBird – Afton Canyon Hot Spot http://ebird.org/ebird/ca/hotspot/L444756
[20] USFWS 2013

Golden Eagle

While the DEIS/R recognizes that the whole project site is eagle foraging habitat, the DEIS/R fails to adequately evaluate the impacts to golden eagle in the project area and from the proposed project especially in the context of other permitted and constructed developments and future development. In general golden eagle populations in the western United States are declining slightly in the southern parts of its range.[21] The net loss of foraging habitat could cause this territory to be abandoned.

Actively nesting golden eagles were documented within eight miles of the proposed project site—thus the project threatens nesting and breeding as well as foraging and may impact the species at a population level., based on the threats— of habitat impact, as well as the unanalyzed impacts to nesting and breeding, the BLM should require, at minimum, that a permit be obtained under the Bald and Golden Eagle Act for impacts to golden eagles from the proposed project before any BLM approvals.

31-33

Swainson's Hawk

While the DEIS/R does not discuss Swainson's hawk, this species, which is state listed as endangered is documented as occurring at Zzyzx Springs on April 10, 2011[22]. The DEIS/R fails to actually analyze the impacts of the proposed project on Swainson's hawks. While it is very unlikely that Swainson's hawks would utilize the project sites for nesting, impacts to these rare raptors could still occur as they migrate through the proposed project area.

31-34

Burrowing Owl

The DEIS/R states that "The entire Project site may be used by burrowing owls for foraging during migration or as resident breeding and foraging habitat" and that in 2012, thr project site was estimated to support between 9 and 24 burrowing owls while owl sign was detected at 50 burrows in 2013 (DEIS/R at PDF page 224).

While burrowing owls are declining in California, the remaining stronghold for burrowing owls in California – the Imperial Valley – has documented decline of 27% in the past[23], resulting in an even more dire state for burrowing owls in California. Because burrowing owls are in decline throughout California, and now their "stronghold" is documented to be declining severely, the burrowing owls on this proposed project site (and on other renewable energy projects) become even more important to species conservation efforts. While the acquisition of habitat specifically for burrowing owls as offsets to impacts is important, it is impossible e to evaluate the impact of the proposed project primarily because the actual number of breeding pairs of burrowing owls on the proposed project site is not evident.

31-35

[21] Milsap et al. 2013; Kochert & Steenhoff 2002
[22] eBird – Zzyzx Springs Hot Spot http://ebird.org/ebird/ca/hotspot/L350673
[23] Manning 2009.

Because there is no scientific evidence that passively relocating burrowing owls is a successful strategy for long-term survival of burrowing owls, if owls are to be "passively relocated", the only way to evaluate the effectiveness of that action is monitoring, therefore the BLM needs to require monitoring of passively relocated owls to determine their ultimate fate.

Shockingly, no mitigation acquisition to offset impacts to on-site burrowing owls is required. Mean burrowing owl foraging territories are 242 hectares in size, although foraging territories for owl in heavily cultivated areas is only 35 hectares[24]. The DEIS/R fails to identify the number of territories that occur on the proposed project site. Absent the actual number of territories that overlap with the proposed project site, the evaluation of mitigation acquisition is flawed. However, mitigation acreage needs to be required – calculated using the mean foraging territory size times the number of territories, although using the average foraging territory size for mitigation calculations may not accurately predict the carrying capacity and may *overestimate* the carrying capacity of the lands selected for mitigation. It is unclear if the DEIS/R relied on guidance from CDFW from 2012, and that guidance still does not fully incorporate current population declines[25] and additional research on the species habitat[26]. Lastly, because the carrying capacity is tied to habitat quality, mitigation lands that are acquired for burrowing owl that can not be avoided be native habitat on undisturbed lands, not cultivated lands, which are subject to the whims of land use changes. The long-term persistence of burrowing owls lies in their ability to utilize natural landscapes, not human-created ones.

31-35 cont.

While the APM 45 states that for each burrow destroyed 5 burrows will be constructed elsewhere (DEIS/R at PDF page 238), it is completely unclear where those burrows will be constructed. Much clearer information needs to be included and as should certain requirements, including 1) the lands they are placed on are conserved in perpetuity 2) the lands they are placed on have the carrying capacity to support burrowing owls at five times the density and 3) follow-up monitoring shows that burrowing owls are actually using the burrows at a pre-established success criteria.

6. Special Status Plants

The general absence of non-native plant species except in disturbed areas is testament to the undisturbed ecosystem in which the proposed project is proposed. Emory's crucifixion thorn is a Pleistocene relict species distributed very sparsely throughout the warm deserts. While avoidance from construction is a feel good step, the persistence of the population over time is questionable based on the fact that it will be within an industrial site. Additional mitigation in the form of acquisition of existing populations close to the project site would help to assure that this species remains in the California deserts as a rare relict.

31-36

[24] USFWS 2003
[25] Manning 2009
[26] USFWS 2003

We are also concerned about the adequacy of the surveys for rare plants. The DEIS/R recognizes that perennial herbs, for example small-flowered androstephium, did not come up at reference sites and therefore would not be expected to be found on the project site due to inappropriate climatic conditions when surveyed (DEIS/R at PDF page 176). Also any relatively short-term survey windows of 3-4 years in the California deserts can never "definitively rule[d] out for occurrence in the area" (DEIS/R at PDF page 176). Some plants show above ground parts only once per decade. As stated above, failure to conduct sufficient surveys prior to environmental review of the project effectively eliminates the most important function of surveys - using the information from the surveys to avoid and minimize harm caused by the project and reduce the need for mitigation. Often efforts to mitigate harm are far less effective than preventing the harm in the first place. 31-37

7. Badger and Desert Kit Foxes

The desert kit fox and badgers are experiencing unprecedented impacts from development of renewable energy projects in their habitat. For desert kit fox, to date on public lands alone, eighteen solar and transmission project applications covering more over 96,000 acres are currently filed as of January 2013[27]. Fifteen approved solar projects, most of which are currently under construction, cover almost 39,000 acres of desert kit fox habitat[28]. Over 30,000 additional acres of proposed solar projects are actively undergoing environmental review[29]. As of January 2013, eleven wind projects covering almost 75,000 acres have been approved with many of them in the construction phase[30]. Three additional projects covering 16,611 acres are currently under environmental review[31]. In addition, twenty-eight projects are authorized to do wind testing on almost 270,000 acres[32]. Another forty wind project applications are in development or propose testing, covering an additional 485,000 acres[33]. The potential cumulative development for wind in desert kit fox and badger habitat could cover close to 850,000 acres. In our review of these projects, very few of them evaluate the impacts to desert kit fox populations or require any mitigation other than "passive relocation". The DEIS/R fails to adequately discuss the desert kit fox in the context of their great site fidelity, challenges of "passive relocation" with this species that generally go to great effort to return to their on-site territories. 31-38

[27] BLM 2012. Solar Apps and Auths. http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/pa/energy/solar.Par.84447.File.dat/BLM%20Solar%20Apps%20and%20Auths.pdf
[28] Ibid
[29] Ibid
[30] BLM Wind Apps & Auths July 2012 http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/pa/energy.Par.5556.File.dat/BLM%20Solar%20Apps%20&%20Auths%20July%202012.pdf and Kern County wind projects http://www.co.kern.ca.us/planning/pdfs/renewable/wind_projects.pdf
[31] Kern County wind projects http://www.co.kern.ca.us/planning/pdfs/renewable/wind_projects.pdf
[32] BLM Wind Apps & Auths July 2012 http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/pa/energy.Par.5556.File.dat/BLM%20Solar%20Apps%20&%20Auths%20July%202012.pdf
[33] Ibid

The DEIS/R fails to estimate the number of desert kit fox or badgers on the project site, or analyze impacts to them from the proposed project. The DEIS/R points to three inadequate "mitigation measures" which are really just temporary avoidance measures and do not address the long-term survival of desert kit fox or badgers on the proposed project site - Mitigation Measures 3.4-1a (monitoring by a designated biologist); 3.4-1b (biological monitoring during construction); and 3.4-1c (WEAP). Amazingly, it does not require an *American Badger and Desert Kit Fox Mitigation and Monitoring Plan*, which are required for all other solar projects in th CDCA and provide additional safeguards to be put in place for the kit fox and badger. As part of that plan, a "monitoring and reporting plan to evaluate success of the relocation efforts and any subsequent re-occupation of the project site" is required, and long-term monitoring for the life of the project of the "passively relocated" animals needs to be included.

Among other concerns about passive relocation, we share all of the State veterinarians' concerns about passive relocation as stated in the CEC proceeding[34]:

- "canine distemper virus (CDV) can cause repeated (cyclical) outbreaks. The time when this is most likely to happen is when susceptible young of the year are growing up and dispersing because density is high and animals are moving, therefore there is more opportunity to transmit the virus and more naïve animals present on the landscape to be infected. This time of year also corresponds to the time when projects are permitted to passively relocate foxes whose dens are within the project construction area
- Passive relocation or hazing activities conducted in an area experiencing or adjacent to distemper cases may enhance disease transmission and spread by multiple mechanisms.
    - First, animals stressed by disturbance or relocation may be more susceptible to illness and death because CDV infection decreases immune function (ref).
    - Second, passive relocation activities in an area experiencing clinical CDV cases may result in increased movement of animals shedding virus, thereby increasing the number of new cases or enhancing the spread of disease into new areas.
- Little to nothing is known about the potential impacts of passive relocation on foxes from solar sites nor have alternative techniques been explored to determine best practices. Important unanswered questions include:
    - Do passively relocated animals re-establish territories adjacent to the solar site? Or might this depend on the density or spatial distribution of foxes around a site.
    - Do relocated foxes experience lower survival or different causes of mortality that might need to be addressed through mitigation efforts?
    - Recursion rate – how likely are relocated foxes going to try to get back on site and return to former den areas?
    - Demographic shifts of neighbors

31-38 cont.

[34] http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-07C/TN200995_20131022T141658_Exhibit_2005__CDFW_Outline_for_Proposed_Desert_Kit_Fox_Health_M.pdf

- Reproductive impact (n=1 relocated pair this year had den failure; most other dens were successful this year in producing pups).
- Rapid vs. slow relocation etc.
- Utilization of artificial dens
- Longer term translocation decisions
- Current monitoring limited in scope and inadequate to address needs (underfunded).
- Methods and outcomes for relocation are not evaluated systematically or reported."

31-38 cont.

These issues should also be incorporated into requirements for the proposed project, especially because this proposed project is the closest project to the Genesis solar project, which was the site of the unprecedented first outbreak of canine distemper ever documented in desert kit fox.[35]

8. Cryptobiotic soil crusts and Desert Pavement

The proposed project is located in the Mojave Desert Air Quality Management District area, which is already in non-attainment for PM-10 particulate matter[36]. The construction of the proposed project further increases emissions of these types of particles because of the disruption and elimination of potentially thousands of acres of cryptobiotic soil crusts. Cryptobiotic soil crusts are an essential ecological component in arid lands. They are the "glue" that holds surface soil particles together precluding erosion, provide "safe sites" for seed germination, trap and slowly release soil moisture, and provide CO_2 uptake through photosynthesis[37]. Desert pavements formed over eons and also help to hold small soil particles in place.

The DEIS/R does not describe or quantify the on-site cryptobiotic soil crusts although it does mention them as biological soil crusts and provides a partial list of the ecological services that they perform in relation to special status plant species (DEIS/R at PDF page 193). The proposed project will disturb an unidentified portion of these soil crusts and pavements and cause them to lose their capacity to stabilize soils and trap soil moisture. The DEIS/R fails to provide a map of the soil crusts and desert pavement over the project site, and to present any avoidance or minimization measures. It is unclear how many acres of cryptobiotics soils/desert pavements will be affected by the project. The DEIS/R must identify the extent of the cryptobiotic soils on site and analyze the potential impacts to these diminutive, but essential desert ecosystem components as a result of this project.

31-39

While Mitigation Measure 3.7-4: Protection of Desert Pavement. Requires minimizing ground disturbance in areas covered by desert pavement if possible. "If avoidance of these areas is not possible, the desert pavement surface shall be protected from damage or disturbance from construction vehicles by use of temporary mats on the surface." Has this been shown to be effective?

[35] http://articles.latimes.com/2012/apr/18/local/la-me-0418-foxes-distemper-20120418
[36] http://www.mdaqmd.ca.gov/index.aspx?page=214
[37] Belnap 2003, Belnap et al 2003, Belnap 2006, Belnap et al. 2007

9. Decommissioning and Reclamation Plan

Desert lands are notoriously hard to revegetate or rehabilitate[38] and revegetation never supports the same diversity that originally occurred in the plant community prior to disturbance[39]. The task of revegetating almost eleven square miles will be a Herculean effort that will require significant financial resources. In order to assure that the ambitious goals of the revegetation effort is met post project closure, it will be necessary to bond the project, so that all revegetation obligations will be met and assured. The bond needs to be structured so that it is tied to meeting the specific revegetation criteria.

The project will cause permanent impacts to the on-site plant communities and habitat for wildlife despite "revegetation", because the agency's regulations based on the West Mojave Plan's rehabilitation strategies[40] only requires 40% of the original density of the "dominant" perennials, only 30% of the original cover. Dominant perennials are further defined as "any combination of perennial plants that originally accounted cumulatively for at least 80 percent of relative density".[41] These requirements fail to truly "revegetate" the plant communities to their former diversity and cover even over the long term. BLM's own regulations 43 CFR 3809.550 et seq. require a detailed reclamation plan and a cost estimate, they need to be included in the revised DEIS/R. A comprehensive decommissioning plan must be developed for the whole project site. This plan must be included in the revised or supplement DEIS/R in order to evaluate the effectiveness as mitigation. 31-40

10. Fire Plan

Fire in desert ecosystems is well documented to cause catastrophic landscape scale changes[42] and impacts to the local species[43]. The DEIS/R fails to adequately address, much less analyze the impact that an escaped on-site-started fire could have on the natural lands adjacent to the project site if it escaped from the site – especially to the resources of the Mojave National Preserve. The DEIS/R also fails to address the mitigation of this potential impact. Instead it defers to construction-related fire and safety measures A fire prevention and protection plan needs to be developed and required to prevent the escape of fire onto the adjacent landscape (avoidance), lay out clear guidelines for protocols if the fire does spread to adjacent wildlands (minimization) and a revegetation plan if fire does occur on adjacent lands originating from the project site (mitigation) or caused by any activities associated with construction or operation of the site even if the fire originates off of the project site. 31-41

[38] Lovich and Bainbridge 1999
[39] Longcore et al. 1997
[40] http://www.blm.gov/ca/st/en/fo/cdd/wemo.html
[41] Ibid
[42] Brown and Minnich 1986, Lovich and Bainbridge 1999, Brooks 2000, Brooks and Draper 2006, Brooks and Minnich 2007
[43] Dutcher 2009

11. Failure to Identify Appropriate Mitigation

As discussed above, because the DEIS/R fails to provide adequate identification and analysis of impacts, inevitably, it also fails to identify adequate mitigation measures for the project's environmental impacts. "Implicit in NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' 42 U.S.C. § 4332(C)(ii), is an understanding that an EIS will discuss the extent to which adverse effects can be avoided." *Methow Valley*, 490 U.S. at 351-52. Because the DEIS does not adequately assess the project's direct, indirect, and cumulative impacts, its analysis of mitigation measures for those impacts is necessarily flawed. The DEIS must discuss mitigation in sufficient detail to ensure that environmental consequences have been fairly evaluated." *Methow Valley*, 490 U.S. at 352; *see also Idaho Sporting Congress*, 137 F.3d at 1151 ("[w]ithout analytical detail to support the proposed mitigation measures, we are not persuaded that they amount to anything more than a 'mere listing' of good management practices"). As the Supreme Court clarified in *Robertson*, 490 U.S. at 352, the "requirement that an EIS contain a detailed discussion of possible mitigation measures flows both from the language of [NEPA] and, more expressly, from CEQ's implementing regulations" and the "omission of a reasonably complete discussion of possible mitigation measures would undermine the 'action forcing' function of NEPA." 31-42

Although NEPA does not require that the harms identified actually be mitigated, NEPA does require that an EIS discuss mitigation measures, with "sufficient detail to ensure that environmental consequences have been fairly evaluated" and the purpose of the mitigation discussion is to evaluate whether anticipated environmental impacts *can be avoided*. *Methow Valley*, 490 U.S. at 351-52. As the Ninth Circuit recently noted: "[a] mitigation discussion without at least *some* evaluation of effectiveness is useless in making that determination." *South Fork Band Council of Western Shoshone v. DOI* , 588 F.3d 718 , 727 (9th Cir. 2009) (emphasis in original).

Here, the DEIS does not provide a full analysis of possible alternatives and mitigation measures to avoid or lessen the impacts of the proposed project and therefore the BLM cannot properly assess the likelihood that such measures would actually avoid the impacts of the proposed project.

D. Key Plans Not Included

The DEIS/R relies upon plans identified in the DEIS for adequate mitigation but which are unavailable and include: 31-43

- Revegetation Plan for temporarily disturbed area (DEIS/R at PDF page 31)
- Worker Environmental Awareness Program (WEAP) (DEIS/R at PDF page 33)
- Comprehensive Drainage, Erosion, and Sedimentation Control Plan (DEIS/R at PDF page 33)
- Vegetation Resources Management Plan (DEIS/R at PDF page 33)

- Desert Tortoise Translocation Plan (DEIS/R at PDF page 38)
- Burrowing Owl Mitigation and Monitoring Plan (DEIS/R at PDF page 43)
- Lighting Plan (DEIS/R at PDF page 46)
- Soil erosion control plan (DEIS/R at PDF page 48)
- plan for identification and avoidance or protection of sensitive desert pavement (DEIS/R at PDF page 49)
- Comprehensive Drainage, Stormwater, and Sedimentation Control Plan (DEIS/R at PDF page 52)
- Groundwater monitoring and Plan ((DEIS/R at PDF page 53 & 59

Plans that should be required in the DEIS/R but not:

- American Badger and Desert Kit Fox Mitigation and Monitoring Plan
- Operations Dust Control Plan
- Avian Protection Plan
- Desert Tortoise Management Plan for Compensatory Mitigation Lands
- Special-status Plant Impact Avoidance and Mitigation Plan
- Ground Water Dependent Vegetation Monitoring Plan
- Bat Protection Plan
- Wildland Fire Plan

All of these plans are key components to evaluating the effectiveness of the avoidance, minimization and mitigation to biological resources by the proposed project. Their absence makes it impossible to evaluate the impacts from the proposed project. Each of these plans needs to be included in a revised DEIS/R.

31-43 cont.

E. Impacts to Water Resources— Surface and Groundwater Water Impacts and Impacts to Aquatic Species

The DEIS/R states that 192 AFY would be needed during construction (DEIS/R at PDF page 86) and 33 afy during operations and maintenance (DEIS/R at PDF page 86) The amount of water use by the project will be significant in this arid area and the DEIS/R does not contain sufficient information to show that surface resources on other public lands will not be affected by the drawdown of the water table over the life of the project, especially Zzyzx Spring and other locations in the Mojave National Preserve.

The Center is particularly concerned about the impact to Zzyzx and Lake Tuenidae regarding the critically endangered Mojave Tui Chub. This area is the stronghold for this endemic species and any decrease in water from this proposed project may indeed affect the water resources and in-turn the chub. The BLM must consult with FWS regarding potential impacts to this species. Alternatives should be considered to avoid impacts to water resources and this species.

31-44

The water monitoring plan should include monitoring not only of water levels in Zzyzx Springs, but also water quality. 31-45

Reserved Water Rights: As BLM is well aware, the California Desert Protection Act ("CDPA") expressly reserved water rights for wilderness areas that were created under the act including the Hollow Hills wilderness and the Mojave wilderness areas in the Preserve and others. 16 U.S.C. §410aaa-76.[44] The CDPA reserved sufficient water to fulfill the purposes of the Act which include to "preserve unrivaled scenic, geologic, and wildlife values associated with these unique natural landscapes," "perpetuate in their natural state significant and diverse ecosystems of the California desert," and "retain and enhance opportunities for scientific research in undisturbed ecosystems." 103 P.L. 433, Sec. 2. The priority date of such reserved water rights is 1994 when the CDPA was enacted. Therefore, at minimum, the BLM must ensure that use of water for the proposed project (and cumulative projects) *over the life of the proposed projects* will not impair those values in the wilderness that depend on water resources (including perennial, seasonal, and ephemeral creeks, springs and seeps as well as any riparian dependent plants and wildlife).

Although no *express* reservation of rights has been made for many of the other public lands in the CDCA, the DEIS should have addressed the federal reserved water rights afforded to the public to protect surface water sources on all public lands affected by the proposed project. Pursuant to Public Water Reserve 107 ("PWR 107"), established by Executive Order in 1926, government agencies cannot authorize activities that will impair the public use of federal reserved water rights. 31-46

PWR 107 creates a federal reserved water right in water flows that must be maintained to protect public water uses. *U.S. v. Idaho*, 959 P.2d 449,453 (Idaho, 1998) *cert. denied; Idaho v. U.S.* 526 U.S. 1012 (1999); *Cappaert v. U.S.*, 426 U.S. 128, 145 (1976). PWR 107 applies to reserve water that supports riparian areas, reserve water that provides flow to adjacent creeks and isolated springs that are "nontributary" or which form the headwaters of streams. *U.S. v. City & County of Denver*, 656 P.2d 1, 32 (Colo., 1982). Accordingly, BLM cannot authorize activities that will impair the public use of reserved waters covered by PWR 107.

BLM must examine the federal reserved water rights within the area affected by the proposed project that will use significant amounts of scarce groundwater. This examination must include a survey of the any water sources potentially affected by the proposed project on BLM lands or within the Preserve. The BLM must ensure that any springs, seeps, creeks or other water sources on public land or in the Preserve (and particularly within the wilderness areas) are not degraded by the proposed projects' use of water and continue meet the needs of the existing wildlife and native vegetation that depend on those water resources.

[44] The reservation excluded two wilderness areas further south than this project area with regard to Colorado River water. See 103 P.L. 433; 108 Stat. 4471; 1994 Enacted S. 21; 103 Enacted S. 21, SEC. 204. COLORADO RIVER. ("With respect to the Havasu and Imperial wilderness areas designated by subsection 201(a) of this title, no rights to water of the Colorado River are reserved, either expressly, impliedly, or otherwise.")

PWR 107 also protects the public lands on which protected water sources exist. Accordingly, BLM should not only consider the impact of projects on water sources present on public lands, but also the direct and indirect impacts of the proposed project on the surrounding lands as well as impacts to the ecosystem as a whole.

The Center is also concerned that the discussion in the DEIS/R is incomplete because it fails to address any potential water rights that could arguably be created from use of groundwater by the proposed project on these public lands. At minimum, if the proposed project is approved (which we do not support) the BLM must address the question of water rights and ensure that any water rights that could *arguably* be created will be conveyed back to the BLM owner and run with the land at the end of the proposed project ROW term. The BLM must provide a mechanism to insure that in no case will the use of water for the proposed project on these public lands result in water rights accruing to the project applicant that it could arguably convey to any third party. Therefore, any water rights *arguably* created by groundwater pumping on these public lands for the proposed project must not ultimately accrue to any third party for use *off-site or on-site* in the future for any other project. Moreover, BLM should ensure that the applicant will not use the groundwater associated with the project off-site for any purpose. 31-46 cont.

The DEIS/R must include a more comprehensive analysis of the availability of the water required for the project, of the direct, indirect and cumulative impacts to groundwater and surface water resources, analysis of alternatives to avoid such impacts (for example alternative sites and distributed PV alternatives), and mitigation measures.

F. The DEIS/R Fails to Adequately Identify, Analyze and Off-set Impacts to Air Quality.

The DEIS/R fails to adequately address air quality issues including PM10 both during construction and operation which is of particular concern in this area which is a nonattainment area for PM10 and ozone. It is clear that on-site activities will result in bare soils and increased PM10 may be introduced into the air by wind and that the use of the area during construction and operations will lead to additional PM10 emissions from the site. Although some mitigation measures are suggested they are not specific and enforceable and because the extent of the impact has not been adequately addressed as an initial matter there is no way to show that the mitigation measures proffered will reduce the impacts to less than significance. As a result, a consistency determination cannot be made for this project. 31-47

BLM fails to consider any alternatives to the project that would minimize such emissions (such as a distributed PV alternative) or to require that these near-term emissions be off set in any way.

G. The Analysis of Cumulative Impacts in the DEIS Is Inadequate

A cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable 31-48

future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. The Ninth Circuit requires federal agencies to "catalogue" and provide useful analysis of past, present, and future projects. *City of Carmel-By-The-Sea v. U.S. Dept. of Transp.*, 123 F.3d 1142, 1160 (9th Cir. 1997); *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 809-810 (9th Cir. 1999).

"In determining whether a proposed action will significantly impact the human environment, the agency must consider '[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.' 40 C.F.R. § 1508.27(b)(7)." *Oregon Natural Resources Council v. BLM,* 470 F.3d 818, 822-823 (9th Cir. 2006). NEPA requires that cumulative impacts analysis provide "some quantified or detailed information," because "[w]ithout such information, neither courts nor the public . . . can be assured that the Forest Service provided the hard look that it is required to provide." *Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1379 (9th Cir. 1988); *see also id*. ("very general" cumulative impacts information was not hard look required by NEPA). The discussion of future foreseeable actions requires more than a list of the number of acres affected, which is a necessary but not sufficient component of a NEPA analysis; the agency must also consider the actual environmental effects that can be expected from the projects on those acres. *See Klamath-Siskiyou Wildlands Ctr. v. BLM*, 387 F.3d 989, 995-96 (9th Cir. 2004) (finding that the environmental review documents "do not sufficiently identify or discuss the incremental impact that can be expected from each [project], or how those individual impacts might combine or synergistically interact with each other to affect the [] environment. As a result, they do not satisfy the requirements of the NEPA.") Finally, cumulative analysis must be done as early in the environmental review process as possible, it is not appropriate to "defer consideration of cumulative impacts to a future date. 'NEPA requires consideration of the potential impacts of an action *before* the action takes place.'" *Neighbors*, 137 F.3d at 1380 *quoting City of Tenakee Springs v. Clough*, 915 F.2d 1308, 1313 (9th Cir. 1990) (emphasis in original).

31-48 cont.

The DEIS/R identifies many of the cumulative projects but does not meaningfully analyze the cumulative impacts to resources in the California desert from the many proposed projects (including renewable energy projects and others). Moreover, because the initial identification and analysis of impacts is incomplete, the cumulative impacts analysis cannot be complete. For example, the identification of the special status birds (see above) likely to be impacted by the proposed project are not included in the DEIS/R cumulative analysis either, the cumulative impacts are therefore incomplete and are also inadequate.

The DEIS/R also fails to consider all reasonably foreseeable impacts in the context of the cumulative impacts analysis. *See Native Ecosystems Council v. Dombek, et al,* 304 F.3d 886 (9th Cir. 2002) (finding future timber sales and related forest road restriction amendments were "reasonably foreseeable cumulative impacts"). The DEIS/R also fails to provide the needed analysis of how the impacts might combine or synergistically interact to affect the environment in this valley or region, for example through loss of movement corridors for wildlife and

31-49

fragmentation of habitat. *See Klamath-Siskiyou Wildlands Ctr. v. BLM*, 387 F.3d 989, 995-96 (9th Cir. 2004). 31-49 cont.

The NEPA regulations also require that indirect effects including changes to land use patterns and induced growth be analyzed. "Indirect effects," include those that "are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include *growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems*." 40 C.F.R. s.1508.8(b) (emphasis added). *See TOMAC v. Norton*, 240 F. Supp.2d 45, 50-52 (D.D.C. 2003) (finding NEPA review lacking where the agency failed to address secondary growth as it pertained to impacts to groundwater, prime farmland, floodplains and stormwater run-off, wetlands and wildlife and vegetation); *Friends of the Earth v. United States Army Corps of Eng'rs*, 109 F. Supp.2d 30, 43 (D.D.C. 2000) (finding NEPA required analysis of inevitable secondary development that would result from casinos, and the agency failed to adequately consider the cumulative impact of casino construction in the area); *see also Mullin v. Skinner*, 756 F. Supp. 904, 925 (E.D.N.C. 1990) (Agency enjoined from proceeding with bridge project which induced growth in island community until it prepared an adequate EIS identifying and discussing in detail the direct, indirect, and cumulative impacts of and alternatives to the proposed Project); *City of Davis v. Coleman*, 521 F.2d 661 (9th Cir. 1975) (requiring agency to prepare an EIS on effects of proposed freeway interchange on a major interstate highway in an agricultural area and to include a full analysis of both the environmental effects of the exchange itself and of the development potential that it would create). 31-50

Among the cumulative impacts to resources that have not been fully analyzed are impacts to desert tortoise, impacts to desert bighorn sheep, impacts to golden eagles and migratory birds, and impacts to water resources. The cumulative impacts to the resources of the California deserts has not been fully identified or analyzed, and mitigation measures have not been fully analyzed as well.

H. The Alternatives Analysis is Inadequate

NEPA requires that an EIS contain a discussion of the "alternatives to the proposed action." 42 U.S.C. §§ 4332(C)(iii),(E). The discussion of alternatives is at "the heart" of the NEPA process, and is intended to provide a "clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. §1502.14; *Idaho Sporting Congress*, 222 F.3d at 567 (compliance with NEPA's procedures "is not an end in itself . . . [but] it is through NEPA's action forcing procedures that the sweeping policy goals announced in § 101 of NEPA are realized.") (internal citations omitted). NEPA's regulations and Ninth Circuit case law require the agency to "rigorously explore" and objectively evaluate "all reasonable alternatives." 40 C.F.R. § 1502.14(a) (emphasis added); *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 234 Fed. Appx. 440, 442 (9th Cir. 2007). "The purpose of NEPA's alternatives requirement is to ensure agencies do not undertake projects "without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same 31-51

result by entirely different means." *Envtl. Defense Fund, Inc. v. U.S. Army Corps of Engrs.*, 492 F.2d 1123, 1135 (5th Cir. 1974). An agency will be found in compliance with NEPA only when "all reasonable alternatives have been considered and an appropriate explanation is provided as to why an alternative was eliminated." *Native Ecosystems Council v. U.S. Forest Serv.,* 428 F.3d 1233, 1246 (9th Cir. 2005); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228-1229 (9th Cir. 1988). The courts, in the Ninth Circuit as elsewhere, have consistently held that an agency's failure to consider a reasonable alternative is fatal to an agency's NEPA analysis. *See, e.g., Idaho Conserv. League v. Mumma*, 956 F.2d 1508, 1519-20 (9th Cir. 1992) ("The existence of a viable, but unexamined alternative renders an environmental impact statement inadequate.").

If BLM rejects an alternative from consideration, it must explain why a particular option is not feasible and was therefore eliminated from further consideration. 40 C.F.R. § 1502.14(a). The courts will scrutinize this explanation to ensure that the reasons given are adequately supported by the record. *See Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 813-15 (9th Cir. 1999); *Idaho Conserv. League*, 956 F.2d at 1522 (while agencies can use criteria to determine which options to fully evaluate, those criteria are subject to judicial review); *Citizens for a Better Henderson*, 768 F.2d at 1057.

Here, BLM too narrowly construed the project purpose and need such that the DEIS/R did not consider an adequate range of alternatives to the proposed project.

The alternatives analysis carried forward in the DEIS/R is inadequate because the alternatives are limited to on-site projects without looking at alternative locations or a distributed scenario. Additional feasible alternatives should be considered including but not limited to an alternative which would: utilize private lands closer to the energy load; off-site alternatives that would significantly reduce the impacts to biological resources including desert tortoise habitat and key movement corridors, and others.

Because there are many feasible alternatives that would avoid or reduce significant impacts of the proposed project that were not considered, but rather were summarily dismissed, and because the range of alternatives is inadequate, the BLM's has failed to comply with NEPA. The existence of several feasible but unexplored alternatives shows that the BLM's analysis of alternatives in the DEIS/R is inadequate.The Center urges the BLM to revise the DEIS/R to adequately address a range of feasible alternatives and other issues detailed above and then to re-circulate a revised or supplemental DEIS for public comment.

31-51 cont.

IV. Conclusion

Thank you for your consideration of these comments. In light of the many omissions in the environmental review to date, we urge the BLM to revise and re-circulate the DEIS/R before making any decision regarding the proposed plan amendment and right-of-way application. In the event BLM chooses not to revise the DEIS/R and provide adequate analysis, the BLM should select the no action/no project Alternative E or Alternative G which finds the site unsuitable for

31-52

solar, no BLM ROW would be granted, (and No County Permit would be granted). Please feel free to contact us if you have any questions about these comments or the documents provided. 31-52 cont.

Sincerely,

Ileene Anderson
Biologist/Desert Program Director
Center for Biological Diversity
PMB 447, 8033 Sunset Blvd.
Los Angeles, CA 90046
(323) 654-5943
ianderson@biologicaldiversity.org

Lisa T. Belenky, Senior Attorney
Center for Biological Diversity
351 California St., Suite 600
San Francisco, CA 94104
(415) 436-9682 x307
Fax: (415) 436-9683
lbelenky@biologicaldiversity.org

cc: (via email)
Ray Bransfield, USFWS, ray_bransfield@fws.gov
Kevin Hunting, CDFW, Kevin.Hunting@wildlife.ca.gov
Tom Plenys, EPA, Plenys.Thomas@epa.gov

Attachment and References: (will be provided on disc via U.S. Mail)

Comment Letter 32

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Wednesday, February 12, 2014 12:23 PM
To: Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mountain Solar

---------- Forwarded message ----------
From: **Inga** <ingador@gmail.com>
Date: Fri, Feb 7, 2014 at 5:31 PM
Subject: Soda Mountain Solar
To: sodamtnsolar@blm.gov

I am writing to voice my opposition to the solar project. I wish BLM would do more to encourage roof top solar and not put all solar projects in the desert. The CA desert is an extremely fragile environment and there are very few pockets of desert wilderness left. I have travelled and camped in this area and feel that this particular spot needs more protection and less construction. As it stands now, the Afton Canyon, nearby the proposed solar site, is a corridor for animals and an extremely bio diverse area that should have more protection under BLM. It s strange that one could drive through a year round water source in the desert! 32-1 32-2

Looking at the maps there are clearly desert tortoises and burrowing owls in the proposed site. This solar project would impact them. I have camped nearby and was lucky enough to see the elusive kit fox. The areas nearby are recreation off-roading areas so it would be great to keep this particular land undisturbed since encroachment is all around. 32-3

I am also concerned that there will be well and water used, given the the drought and that it is the water source and drainage basin of Soda Lake. This area is extremely prone to wind storms. I have camped near the Afton canyon several times, and each time there were massive sand storms. I believe more water will be used than is projected to deal with this. 32-4

As far as I understand, the plant study was done in the fall. There are references to not knowing whether certain plants exist because the researchers were not there during flowering season. Why not? Given the drought, should several flowering seasons go by since desert blooms often are poor during droughts? 32-5

Thank you and can you please keep me updated on the project?

Inga

Comment Letter 33

Dear Jeffery Childers,

2/7/2014

We are writing concerning the Soda Mountains Solar Project in the Mojave Desert. We want to express our opposition to this project. This area is too beautiful. The solar panels and supporting structures would be visible from the Mojave National Preserve and both sides of Interstate 15. 33-1

This project needs to be stopped.

There is a more suitable location north of the 15 freeway and west of Field Road. This location has west-facing slopes and would be more suitable for producing energy during peak hours. It is also near the major power line corridor and is on BLM land. This area would be more out of sight of interstate 15 travelers and Visitors to the Mojave National Preserve. 33-2

The Field Road location is closer to energy users, making it more energy efficient.

We encourage you to do the right thing and oppose the Soda Mountain Solar Project. 33-3

Sincerely,

Susan Stueber and Quintin Lake

Susan Stueber Quintin Lake

Susan Stueber and Quintin Lake
PMB #237
17100 Bear Valley Rd. Ste. B
Victorville, CA 92395-5852
(951) 315-7691

Comment Letter 34

Alexandra Kostalas

From: Childers, Jeffery <jchilders@blm.gov>
Sent: Tuesday, February 11, 2014 5:51 AM
To: Soda Mountain Project EIS-EIR; Janna Scott; Alexandra Kostalas; Michael Manka
Subject: Fwd: Comments on Soda Mountain Solar Project

Jeff Childers

---------- Forwarded message ----------
From: "Karl Young" <karlshak@sonic.net>
Date: Feb 10, 2014 6:56 PM
Subject: Comments on Soda Mountain Solar Project
To: <sodamtnsolar@blm.gov>, <jchilders@blm.gov>
Cc:

Mr. Childers,

These comments concern the 350-megawatt photo-voltaic electric power generating plant proposed on 4,397 acres of BLM land adjacent to the Mojave National Preserve.

It is of great concern to me that the proposed siting for this project directly threatens the Mojave National Preserve in a number of ways in addition to fragmenting bighorn sheep migration corridors, and negatively impacting desert tortoise habitat, endangered tui chub pup fish, and a number of scenic view-sheds. 34-1

As a frequent visitor to the Mohave National Preserve, Afton Canyon, and Zzyzx it seems that not only are the interests of local species being largely ignored but those of the many visitors to the area are as well. The potential effects of this project could certainly lead to my family choosing to no longer visit the area in terms of no longer providing the solitude and relief from urban living that has been so important to us. 34-2

Regarding the local species it seems a real shame that a single project could lead to such fragmentation and loss of connectivity between other protected national areas within the Mojave desert region. 34-3

The irony that a single private entity, Bechtel, the transnational corporation, is the primary beneficiary of this destructive use of public lands is certainly not lost on local residents and the visitors that treasure this area.

It s sad that the BLM seems unable to help mitigate the wholesale destruction of the desert habitats of south eastern California, in terms of this project, the completed Ivanpah Solar Electric Generating System, the proposed Iberdrola Energy Project, and the no doubt countless others to follow. 34-4

Thanks for allowing me to comment.

Sincerely,

Karl Young

--

Karl Young
http://karlshak.com

Comment Letter 35

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Wednesday, February 12, 2014 12:24 PM
To: Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mountain Solar (CACA 49584)

---------- Forwarded message ----------
From: **joe cernac** <joecernac@sbcglobal.net>
Date: Tue, Feb 11, 2014 at 11:28 PM
Subject: Soda Mountain Solar (CACA 49584)
To: sodamtnsolar@blm.gov

Re: Soda Mountain Solar (CACA 49584) **11 Feb 2014**

I have reviewed the DEIS for this proposed 4,000+ acre project. 35-1
I favor alternative G. No project.

I believe that these facilities are unacceptable for public land. The developer/promoters are getting a free ride by the public subsidizing the cost of land. These types of projects need to be built on rooftops of cities where the energy will be used. Which also means that the power transmission infrastructure need not be built. There are many communities with in the Mojave desert close to the LA basin where roof tops could be leased. 35-2, 35-3
In addition, the visual impact is over bearing/unacceptable. It impacts other recreational use by the reflective intensity of the panels. 35-4

The mojave desert region is a remarkably beautiful region. It doesn't need this type of project. 35-5

Sincerely,
Joe Cernac
1219 Singletary Ave.
San Jose, CA 95126

Comment Letter 36

Alexandra Kostalas

From: Brendan Hughes <hugajoshuatree@gmail.com>
Sent: Wednesday, February 12, 2014 3:02 PM
To: Creason, Tracy - LUS
Subject: Comments on Proposed Soda Mountains Solar Project

To Whom It May Concern:

My name is Brendan Hughes and I would like to comment on the proposed Soda Mountains Solar Project, located adjacent to the Mojave National Preserve. I have many concerns about this project, chiefly biological impacts, water resource impacts, visual and recreational resource impacts, and the lack of examination of alternatives. 36-1

The proposed project will have a profoundly negative impact on the biological resources of the California Desert. First, I believe that the 2009 tortoise survey is flawed and should be discarded. Upon reviewing the Biological Report Appendix, it seems that Kiva Consulting found the vast majority of the tortoise sign within the project area, while the URS survey crew found virtually nothing even though they surveyed many times more land than Kiva Consulting. This does not tell me that there are no tortoises or sign where the URS crew surveyed, it tells me that URS biologists didn't know what they were doing. Is this the same company that did the initial surveys for tortoise at Ivanpah? Even if it is not the same company, BLM should discard the URS results and use only Kiva or a similar company with years of experience in the desert, such as Circle Mountain Biological. I have absolutely no faith in URS's ability to competently survey for tortoises. This project should not be able to move forward without an additional spring survey. 36-2

Furthermore, this project could doom one of the last refuges of the Mojave Tui chub by impacting water resources. No extensive surveys of the water resources in the area have been completed. Saying that MC Spring is not connected to the project site is unproven. There may be no current evidence of such a connection, but the studies have not been done to prove or disprove this statement. The project proponent should be required to drill test wells, and study the connections or lack thereof before any use of groundwater can occur. This should include the possible drawdown of the regional water table. I have driven from the project site to the Devil's Playground, just south of MC Spring, and the ride was smooth and straightforward. It would be a miracle if the project site and these springs were NOT connected. Also, groundwater drawdown will affect the private landowner at the Rasor Road exit, and could even affect the water supply of Baker. These possibilities should be definitively ruled out before any project is approved. 36-3 36-4

Additionally, BLM should consider the visual and recreational impacts of this project on the Mojave Preserve, Soda Mountains WSA, and the Rasor OHV Area. Hundreds of thousands of people visit these recreation areas each year for their scenic and open space values. This proposed project will be a blight on the landscape, visible for miles in many directions, and will ruin the open and wild character of this special place. 36-5

Finally, distributed solar and private-land solar options were dismissed from consideration. Rooftop solar is the best and least environmentally damaging option, and should have been considered since this will be a photovoltaic facility. These panels could just as easily go on rooftops in LA and Las Vegas. Also, this site is outside of the BLM Solar Energy Zones. Even though it was grandfathered into the process, the BLM Solar PEIS was a thorough and comprehensive process. Any projects outside of the SEZs should be discouraged by BLM. 36-6 36-7

BLM and San Bernardino County should reject the proposed project and choose Alternative G, which does not permit the project to move forward and prevents future solar development of the area. 36-8

Thank you for your consideration.

Brendan Hughes

60444 Onaga Trl.

Joshua Tree, CA 92252

Comment Letter 37

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Wednesday, February 12, 2014 12:24 PM
To: Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: complaint

---------- Forwarded message ----------
From: **Lauren Browning** <browningart@sbcglobal.net>
Date: Wed, Feb 12, 2014 at 8:13 AM
Subject: complaint
To: sodamtnsolar@blm.gov

These public comments are just smoke and mirrors. We all know it. But might does not make right. You are making a lot of real people very sad, and soon you will hurt animals too. Congratulations. You are an apologist for your pocketbook. 37-1

Comment Letter 38

Alexandra Kostalas

From: Alexandra Kostalas
Sent: Tuesday, February 18, 2014 8:48 AM
To: Alexandra Kostalas
Subject: FW: Comments: Soda Mountain Solar project (CACA #049584)

From: Childers, Jeffery [mailto:jchilders@blm.gov]
Sent: Monday, February 17, 2014 9:08 AM

---------- Forwarded message ----------
From: **HOLMES, KEVIN E** <kevin.e.holmes@cbp.dhs.gov>
Date: Fri, Feb 14, 2014 at 12:03 PM
Subject: Comments: Soda Mountain Solar project (CACA #049584)
To: "jchilders@blm.gov" <jchilders@blm.gov>, "sodamtnsolar@blm.gov" <sodamtnsolar@blm.gov>
Cc: "kev@vt.edu" <kev@vt.edu>

Good afternoon:

It was my pleasure to read the draft Environmental Impact Statement (EIS) for the Soda Mountain Solar project (CACA #049584). This is a very exciting project which enhances alternative, renewable energy technology. As such it is with great interest to read about the potential impacts that this project could have on our natural resources and environment.

I noted in the EIS that the project had potential to impact the distribution of invasive species of plants. To address this, the EIS includes Applicant's Proposed Measure (APM) 50, for project-specific integrated weed management plan. 38-1

I appreciate that the EIS takes account for the fact that Burrowing Owls are present and established on the project site, and that a plan is in place to relocate them at a time in their life cycle which will have the least impact on the species (APM 45-48, 57). 38-2

I also appreciate the fact that the EIS accounts for Desert Tortoise presence on the project site, to include construction of exclusion fencing (APM 66). 38-3

The presence of Desert Bighorn Sheep appears to receive the most attention, perhaps because of its listing as a BLM sensitive species. Certainly as the surveyed individuals are attributed to be a subpopulation of a meta-population, and with the presence of I-15 being a factor, additional habitat fragmentation is of greater concern for this species. The placement of water resources north of I-15 (APM 75) to encourage migration seems to miss the mark, and it is the only APM to address Bighorn Sheep. Is there any past success with this in management of Bighorn Sheep? Or is it simply, "leading a horse to water?" In other words, what evidence is there to suggest that it will work in protecting the wildlife? Are there any collateral benefits to providing water resources for wildlife? (could other target species benefit from it?) Are there any unintended consequences (predation)? Are there any studies on which to base this? 38-4

I cannot help to notice that in assessing threats to wildlife, your EIS failed to take into consideration arthropods. I found that there are at least two endangered arthropod species, *Apodemia mormo langei*, and *Speyeria callippe callippe*, listed by US Fish and Wildlife with a range and distribution covering the project area. Will these and other arthropod species be surveyed for? 38-5

Thank you for considering my comments on the Soda Mountain Solar Project. I look forward to hearing more about the project and its future implementation.

Regards,

Kevin E Holmes

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:01 AM
To: Soda Mountain Project EIS-EIR; Alexandra Kostalas; Michael Manka
Subject: Fwd: Comments for the proposed Soda Mountain Solar Project

---------- Forwarded message ----------
From: **Christian Guntert** <chguntert@yahoo.com>
Date: Thu, Feb 13, 2014 at 3:30 PM
Subject: Comments for the proposed Soda Mountain Solar Project
To: "sodamtnsolar@blm.gov" <sodamtnsolar@blm.gov>
Cc: Neil Ringlee <nrringlee@yahoo.com>, Jeff Crouse <jjrestorationservice@yahoo.com>, Mark LeCompte <lecomptefam@msn.com>, Bob Burke <cameracoordinator@sheepsociety.com>, Glenn Sudmeier <glenn@sudmeier.org>, Terry & ANDERSON <equinerr@msn.com>, Steve Marschke <stevemarschke@gmail.com>, George Sutton <suttongs@msn.com>, Cliff McDonald <bigmc@ctaz.com>, Norm Lopez <normlopez@aol.com>, Stevan Hart <hartbyte@ix.netcom.com>, Gary Thomas <g.cranky@verizon.net>, John Hybarger <ltdadventure@earthlink.net>, John Roy <johnandlindaroy@yahoo.com>, Shawn Finley <ShawnF@nosler.com>, "Jamesdahl@sbcglobal.net" <Jamesdahl@sbcglobal.net>, John Whipple <jwhipple04@aol.com>, Dayan Anderson <liddlebopeep@hotmail.com>, Dennis Anderson <dennis@andersonseafoods.com>

Dear Friends at the BLM,
As an avid hiker, outdoorsman, Mojave Desert resident, and volunteer/boardmember for the Society for Conservation of Bighorn Sheep (SCBS), it is my duty to inform you of my strong objection to the Soda Mountain Solar Project as it is currently proposed. SCBS has been stewarding water sources and helping Bighorn Sheep in the Mojave Desert for over 50 years. I object to this project for the following reasons: 39-1

1. Bighorn Sheep utilize both sides of this proposed project site (demised by the Interstate 15 corridor). Depending upon seasons, weather conditions, water availability, feed conditions and intrusions into their habitat, Bighorn can have a large range at varying elevations within their habitat. They are often seen on valley floors as well as mountain tops and ridges. From my perspective, not only do I want to see mitigative water source measures taken (the project site will disrupt local springs which have not been addressed and/or identified within the proposed site documentation), but we also want to see mitigative measures to promote and increase genetic diversity for meta-populations affected initially by construction of Interstate 15, and now further disrupted by fencing off of the project site by Soda Mountain Solar/Bechtel.

2. Proposed fencing within the project area will hinder transitions of Bighorn between meta-populations which is currently done through a box culvert/tunnel under the Interstate 15 Freeway. My suggestion is that you go measure the decibel levels in that tunnel on any given Friday night at 6 PM with a noise dosimeter and decide if the sheep would be terrified to use the tunnel or not.The noise generated by the traffic going to Las Vegas is incredibly loud. This project presents fenced corridors which will restrict Bighorn movement, migration and ultimately genetic diversity of the local populations.This is a situation that needs to be improved upon, not made worse which is what the Soda Mountain Solar Project will do - make it worse. 39-2

3. Proposed water source mitigative measures for the Bighorn Sheep in and near the project site are inadequate for the long-term health of the Bighorn meta-populations in the area. Siting of water source mitigative measures must include a thorough study of the habitat, birthing areas, and meta-population in that local area.
Developing a water source in the Mojave without adequate information and study is akin to the story of the drunk who lost his pocket watch at night. When a passing Police Officer sees the drunk holding onto a streetlight, he stops and asks why the drunk is there. The drunk responds that he dropped his pocket watch and was looking for it. When the Officer begins

to help look but can't see the pocketwatch, he finally asks 'where did you lose it?' to which the drunk responds 'about two blocks that way'. Flustered, the Police Officer asks 'so why aren't you looking over there?' to which the drunk responds "because there is light here."
The point to the story is that it putting water in an easy and convenient location is great if you don't care where the animals are; however, that doesn't make it right or achieve the goal of helping the Bighorn. There is nothing easy or convenient about the Mojave Desert, Bighorn Sheep Habitat, or the proposed location for the project. Bechtel, and/or their consultant, has simply not done their homework or provided adequate mitigation. Because of this, the project should not be permitted to move forward. I am not anti-growth, I am pro-common sense and pro-Bighorn.

39-2 cont.

Thank you for your time. If you wish to discuss further, I would be happy to be contacted. You can reach me at my email address.
Sincerely,
Christian Guntert
Victorville, CA 92395

Comment Letter 40

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:02 AM
To: Alexandra Kostalas; Soda Mountain Project EIS-EIR; Michael Manka
Subject: Fwd: Soda Mountain Solar Public Comments

---------- Forwarded message ----------
From: **Rebecca Lamphear** <rebecl7@vt.edu>
Date: Sat, Feb 15, 2014 at 11:11 PM
Subject: Soda Mountain Solar Public Comments
To: sodamtnsolar@blm.gov

Dear Sir/Madam

I am in opposition to the proposed solar power plant to be located at Soda Mountain for several reasons, mainly the impact this power plant will have on several species including big born sheep, as well as the impact of water resources for the endangered mohave tui chub. I have included additional concerns I feel have impact on the natural community. 40-1

- The proposed solar power plant violates San Bernadino's new proposed ordinance disallowing renewable energy facilities that fall within 2 miles of a park, the ordinance mentions there shall not be a project that distracts from visual resources. Currently the proposed location is 1 mile from Mojave National Preserve. 40-2

- National Park service has raised concerns regarding big horn sheep migratory routes that will be impacted as a result of the project. A biologist from the National Park Service is on record saying that it would be difficult to imagine big horn sheep navigating around and through solar arrays. I would agree with this statement. 40-3

- Thirdly, the fate of the mohave tui chub. It seems as though impacts proposed on the local aquifer are somewhat uncertain. Removing water from a location where the Mohave tui chub is known to exist exclusively seems to be a dangerous proposition for this fish. 40-4

- • Lastly it has been mentioned by several prominent preservation organizations such as the Sierra Club and The Mojave National Preserve Conservancy. That the location is inappropriate for the proposed solar project and it is not located in a solar zone as pinpointed by the Solar Programmatic Environmental Impact Statement, established by the Federal Government. These proposed solar zones would be more suitable and less impactful on the landscape. 40-5

Thank you for your time and consideration of the above information.

Rebecca Lamphear

Comment Letter 41

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:02 AM
To: Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mountain comments

---------- Forwarded message ----------
From: **Zoe Sumrall** <zdsumrall@gmail.com>
Date: Sun, Feb 16, 2014 at 6:50 AM
Subject: Soda Mountain comments
To: sodamtnsolar@blm.gov

To Whom It May Concern,

That is a lot of public land to devote to a single use, but I am an advocate for solar energy and a former employee of the industry. A few questions come to mind after reading about the project: Are the solar panels proposed for this project made in America? How many jobs will be created for the engineering, installation, and maintenance of this array? Without assuming the photovoltaic modules are non-reflective, the visual impact from Interstate 15 and surrounding roads should be inspected, as to not cause complications with motorists. If the array will be fenced in, what impact will that have on not only the wildlife, but the public who may encounter the displaced wildlife? 41-1 41-2 41-3 41-4
Thank you for your time. I look forward to following up with this project!

Zoë Sumrall
zdsumrall@gmail.com
540-305-9475
Winchester, VA

Comment Letter 42

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:03 AM
To: Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mountain Solar Project DEIS

---------- Forwarded message ----------
From: **Jared Fuller** <jgillenfuller@yahoo.com>
Date: Tue, Feb 18, 2014 at 3:05 PM
Subject: Soda Mountain Solar Project DEIS
To: "sodamtnsolar@blm.gov" <sodamtnsolar@blm.gov>

The Soda Mountain Solar Project should not be approved. The project would harm a variety of important resources. These include vegetation, soil, habitat for desert tortoise and other wildlife, and visual resources. The project would potentially disrupt the viewshed, wildlife populations and connectivity, and runoff patterns in nearby Mojave National Preserve and wilderness or wilderness study areas. 42-1

If however the project receives approval, one of the reduced acreage alternatives should be selected. Soils and standing vegetation should be conserved as much as possible by trimming the vegetation in between panels instead of discing and rolling the entire soil surface. This may reduce dust and would aid site rehabilitation after the project is decommissioned. 42-2

Also, in addition to cacti and special status plants, any impacted blue palo verde and mesquite should be avoided or transplanted. 42-3

Jared G. Fuller
Pleasant Grove, Utah
84062

Comment Letter 43

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:03 AM
To: Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Public comment

---------- Forwarded message ----------
From: **Dessa Kaye** <dlkaye@juno.com>
Date: Thu, Feb 20, 2014 at 2:02 PM
Subject: Public comment
To: sodamtnsolar@blm.gov

Mr. Childers,

Although I am a strong supporter of solar, wind and other alternative energy sources, the proposed Soda Mountain Solar Project is too big, threatens invaluable wilderness and wildlife, and is poorly situated to provide clean, sustainable energy where it's needed. 43-1

In addition to the fact that your DEIS identified around 11,000 brownfields, landfills, and other such sites in California that may be more suitable for renewable energy development than a threatened wilderness area, the high-density consolidation of production is not sustainable and is subject to sabotage and destruction which would widely disrupt power to users. Southern California is especially suited to decentralized power generation in the form of roof-top solar which is much less vulnerable to attack and produces energy where it is used, therefore eliminating the need for long (also vulnerable) transmission lines. 43-2

A project this size also requires between 1,275 and 1,371 acre-feet of water a year for operations which is impractical in the Mojave in the best of times, let alone in the midst of a record drought with no end in sight. 43-3

This location threatens big-horned sheep in the Mojave National Preserve, the federally-threatened desert tortoise and the Mojave fringe-toed lizard, along with burrowing owls and desert kit foxes. Plant species in the area that are considered "threatened by solar development" by the California Native Plant Society include Emory's crucifixion-thorn (*Castela emoryi*), Utah milkvine (*Funastrum utahense*) and the endangered Mohave tui chub. 43-4

The project would also up against the Soda Mountains Wilderness Study Area, part of which was (and will be again) slated to be designated wilderness by Senator Diane Feinstein's California Desert Protection Act of 2011. 43-5

The project footprint and the area surrounding it has been classified by the Nature Conservancy as "core habitat" and was described in an early draft of the Desert Renewable Energy Conservation Plan as a "High Biological Sensitivity" area from which solar developers should be diverted if possible. 43-6

For all these reasons and more, this project is inappropriate and inefficient and should definitely be rejected. 43-7

Thank you,

Dessa Kaye
Studio City, CA
dlkaye@juno.com

TOM BUDLONG
3216 MANDEVILLE CANYON ROAD
LOS ANGELES, CA 90049-1016

Monday, February 24, 2014

Jeff Childers
BLM California Desert District
22835 Calle San Juan de los Lagos
Moreno Valley, CA
92553
By email to SodaMtnSolar@BLM.Gov, and by USPS.

Re: Comment re Alternatives, Soda Mountain Solar Project DEIS/R, November 2013, CACA 049584

Dear Mr. Childers,

The Executive Summary of the DEIS, on page ES-2, discusses BLM's purpose and need, stating it must respond to the Applicant's application.

Chapter 2, Proposed Action and Alternatives, includes as alternatives only variations of the proposed action. It does not include other reasonable alternatives. By including only variations of the same project, the DEIS is in violation of NEPA. The selection of alternatives is too narrow.

The requirement to include all reasonable alternatives is explained in the appropriate CFRs and by the Council on Environmental Quality. The CEQ has published a set of 40 questions and answers to clarify and interpret NEPA and related CFRs[1]. The first two of these 40 questions focus on alternatives.

Range of Alternatives:

40 CFR 1502.14 is the basis for the CEQ explanation and clarification:

(a) Rigorously explore and objectively evaluate all reasonable alternatives…

CEQ Question 1a clarification and interpretation:

The phrase "range of alternatives" refers to the alternatives discussed in environmental documents. It includes all reasonable alternatives, which must be rigorously explored and objectively evaluated…

Alternatives Outside the Capability of Applicant or Jurisdiction of Agency

40 CFR 1502.14:

(c) Include reasonable alternatives not within the jurisdiction of the lead agency.

Question 2a: Alternatives Outside the Capability of Applicant or Jurisdiction of Agency.

Section 1502.14 requires the EIS to examine all reasonable alternatives to the proposal. In determining the scope of alternatives to be considered, the emphasis is on what is "reasonable" rather than on whether the proponent or

44-1

[1] http://www.blm.gov/wo/st/en/prog/planning/nepa/webguide/40_most_asked_questions/questions_1-10.html http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=74c9fcc0a58c626bae6c98fde5d9e7dd&r=PART&n=40y34.0.3.3.3#40:34.0.3.3.3.0.29.14

applicant likes or is itself capable of carrying out a particular alternative. ***Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense****, rather than simply desirable from the standpoint of the applicant.*

Question 2b. Must the EIS analyze alternatives outside the jurisdiction or capability of the agency…?

An alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable…. Alternatives that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable

Requirements for a robust selection of alternatives stem from a Purpose and Need statement that conforms to NEPA requirements, and from other NEPA requirements.

Section 6.2 of the BLM NEPA Handbook[2] (H-1790-1) clarifies that "*the 'need' for the action can be described as the underlying problem or opportunity to which the BLM is responding with the action.*" In recognition of this the DEIS's Purpose and Need statement (p. 1-3) lists three high level needs – Executive Order 13212, Secretarial Order 3285A1, and the President's Climate Action Plan. (DEIS Section ES2.1, BLM Purpose and Need, page ES-2 (pdf 19))

Section 6.2 then clarifies 'purpose'. "*The 'purpose' can be described as a goal or objective that we are trying to reach. Often the 'purpose' can be presented as the solution to the problem described in the 'need' section.* " In the current situation, the purpose could be, or might be, the applicant's proposed action. Section 2 of the DEIS incorrectly bases its alternative analysis on this narrow purpose. It neglects that the goal, solution, or objective is renewable energy, not renewable energy specifically from the applicant's proposed action.

But NEPA does not allow such narrow solutions. NEPA requires that all reasonable alternatives be considered. The requirement applies to reasonable alternatives that are outside the technology proposed, outside the capabilities of the applicant, outside the jurisdiction of the agency (BLM), and even outside of Congress's vision (see CEQ Question 2).

44-1 cont.

Alternative Exploration and Evaluation

The alternatives section of the DEIS does not 'rigorously explore', nor does it 'objectively evaluate' the alternatives presented, as required by NEPA. Instead it merely describes their physical characteristics.

44-2

Reasonable Alternative Locations

Soda Mountain LLC's Form SF-299 submitted in March of 2013 describes its site selection process. Without explanation, the search for alternative sites was restricted to within 50 miles (5 million acres) of the proposed site – any possible site within the vast territory beyond this 50 mile limit was consequently rejected. The DRECP is evaluating some 22.5 million acres, only 5 million of which are (presumably) in the 50 mile radius. The balance was not considered. The solar PEIS identified 285,000 acres in Solar Energy Zones in six western states. The solar PEIS identified another 19 million in variance areas, none of which were considered. Failure to consider these other areas, with no explanation or justification, appears arbitrary. As a minimum, to avoid the potentially huge effort of evaluating as much as 19

44-3

[2] http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.24487.File.dat/h1790-1-2008-1.pdf

million acres, the applicant could have evaluated the 285,000 SEZ acres, a much smaller area than the 5 million acres that was evaluated.

The implication of omitting these areas for site alternatives is that they are considered empty of reasonable alternatives. Such a conclusion would be absurd. Declining to search for alternative locations leaves the applicant open to accusations that it had pre-determined the proposed location, and presented the arbitrary 50 mile radius search zone in an attempt to justify the proposed location.

The introduction to Section 2.8, Alternatives Considered but Eliminated from Detailed Analysis, pointed out that environmentally sensitive areas such as ACECs and DWMAs were not considered. It also eliminated sites based on the eight criteria, or screening factors, listed in Section 2.2, Alternatives Development and Screening.

BLM's purpose and need is cited several times in Section 2.8 to eliminate alternatives. But this purpose and need statement is in violation of NEPA, as described above, and cannot be used to eliminate alternatives from consideration.

Section 2.8 is silent on which of the eight criteria were used to evaluate and eliminate which alternatives. A simple matrix check-list could have been included to present this information. Failure to connect the criteria to alternative site selection again invites suspicion that the proposed location was pre-determined, and the generalized and undocumented elimination criteria are attempts to justify the proposed location.

44-3 cont.

A Reasonable Alternative: Distributed Generation

Rejection of the distributed generation alternative is discussed in Section 2.8.2, Other Types of Renewable Energy Projects (p. 2-41). It states that California alone has 3700 MW installed, and another 4,200 under construction. Note that the capacities of project alternatives presented in Section 2 are between 250 and 358 MW, some 4% of the MW already installed and under construction in California alone. The discussion then lists several reasons for rejection, each rejection explained with unsupported statements:

- Planning and permitting barriers: Not described are the barriers, how the California's 7900 MW installed and under construction have overcome these barriers, and why this project cannot. The statement for rejection as an alternatative is unsupported, leaving room for suspicion that it is incorrect.
- Integration limitations: Distributed generation is characterized as speculative because of limits of integration with the electric grid. Again, specifics are omitted. What are the integration limits? How are California's 7900 installed and under construction megawatts dealing with integration? Explanation is lacking. No independent data or reports are presented to support this rejection for inclusion in the Alternatives section.
- Lack of electricity storage: The only cite is from the California Governor's Office. No independent data or reports are referenced to show that energy storage problems preclude adding 4% to the 7,900 MW already installed and being installed in California. Needed is more substantial information to justify exclusion from the alternatives section.
- Purpose and need: The incorrect (see above) BLM's purpose and need stated in Section 1.2.1 is cited as a reason to reject including distributed generation in the alternatives. A NEPA-compatible statement would allow inclusion of distributed generation as an alternative.

44-4

- Lack of authority: "Furthermore, BLM has no authority or influence over the installation of distributed generation systems…" As described above, NEPA does not restrict inclusion in the alternatives section of the DEIS alternatives that are outside the jurisdiction of the lead agency. (40 CFR 1502.14). This inclusion is repeated by the Council on Environmental Quality, Question 2, as shown earlier in this comment letter. BLM's lack of authority and influence cannot be used to reject analysis of this alternative in the DEIS.

44-4 cont.

BLM must revise its purpose and need statement and include reasonable alternatives in conformance with NEPA. BLM must include these changes in a revised Draft EIS/R, and recirculate the document for public comment.

44-5

Sincerely,

Tom Budlong
Voice: 310-963-1731
Fax: 310-471-7531
email: TomBudlong@RoadRunner.com

Comment Letter 44

TOM BUDLONG
3216 MANDEVILLE CANYON ROAD
LOS ANGELES, CA 90049-1016

Monday, February 24, 2014

Jeff Childers
BLM California Desert District
22835 Calle San Juan de los Lagos
Moreno Valley, CA
92553

By email to SodaMtnSolar@BLM.Gov, and by USPS.

Re: Comment re Unnecessary Degradation, Soda Mountain Solar Project DEIS/R, November 2013, CACA 049584

Dear Mr. Childers,

Given FLPMA's mandate that "**In managing the public lands, the Secretary shall, by regulation or otherwise, take any action necessary to prevent undue or unnecessary degradation of the lands.**", decisions concerning siting the Soda Mountains Solar Project must be postponed so that alternative project locations can be analyzed under the DRECP.

The project will degrade public land. By scraping, clearing, grubbing and grading, the quality of the project site will be substantially reduced. The DRECP represents a careful analysis of the complexity of siting projects for renewable energy, in consideration of both renewable energy and conservation. A goal of the DRECP is to replace the prior chaotic and unplanned site selection process that did not consider conservation with carefully thought-out, vastly more responsible siting selection. 44-6

This project site was selected when responsible site selection as represented by the DRECP had no, or minimal, consideration. The DRECP has a very high probability of identifying alternate sites with much less degradation. DRECP will likely avoid excessive and unnecessary degradation.

In its search for alternative sites Soda Mountain Solar, LLC limited its choice by considering only locations within 50 miles of the proposed alternative. It did not consider the huge public land area of outside the 50 mile radius. This restriction is described in the Form SF-299 submitted to BLM in March, 2013. The project applicant did not explain in Form SF-299, nor does the DEIS explain, why it is not willing to locate more than 50 miles from the proposed location. The restriction appears artificial and arbitrary. 44-7

It is highly likely that siting under DRECP will result in a project that better balances necessity and degradation. Presuming the project is considered necessary, a site with less land degradation would prevent the unnecessary degradation forbidden by FLPMA.

- BLM has a responsibility to the public, and to the mandate in FLPMA, to postpone this decision until the carefully planned DRECP can be used for site selection.
- BLM, with DRECP as a tool, has the opportunity to reject the FLPMA-incompatible selection of the DEIR's Proposed Alternative, in favor of an environmentally responsible DRECP-compatible selection that considers conservation as well as renewable energy. 44-8

Sincerely,

Tom Budlong

Tom Budlong

Voice: 310-963-1731 Fax: 310-471-7531 email: TomBudlong@RoadRunner.com

Comment Letter 44

9 Jan 2014

Congressman Paul Cook
Supervisors Ramos Hovingood – San Bernardino County & Other Supervisors
Bureau of Land Management
California Energy Commission

To All,

The subject is the proposed Soda Mountains

I am unalterably opposed to this project. It is an undriable threat to the integrity of the adjacent Mojave National Preserve, & to surrounding wildlife habitat. It would destroy habitat necessary to resilience of wildlife to stresses that will result from the coming global warming. 44-9 44-10

I am also concerned about hydrologic impact to nearby Zzyzx area. I'm sure the proponent will argue their analysis shows there is no problem, aside from credibility, underground water movement is such an inexact science that the consequence of getting it wrong is not worth the risk. 44-11

Scraping several thousand acres of functioning intact pristine desert is a hugely offensive scorched earth policy, showing no sensitivity to organisms other than ourselves. It is ~~an~~ morally offensive 44-12

Regards
Tom Bridlong
Los Angeles

Comment Letter 45

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:04 AM
To: Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mountains Solar Project
Attachments: Soda Mtns Kiwanis Letter NW (2).docx

---------- Forwarded message ----------
From: **Marc Greenhouse** <marcgreenhouse@gmail.com>
Date: Mon, Feb 24, 2014 at 10:36 AM
Subject: Soda Mountains Solar Project
To: Supervisorlovingood@sbcounty.gov, Supervisorramos@sbcounty.gov, sodamtnsolar@blm.gov
Cc: Peggy Poortinga <peggypoortinga@hotmail.com>

Attached is a copy of a letter regarding the Soda Mountains Solar project.

February 21, 2014

Congressman Paul Cook
Bureau of Land Management
California Energy Commissioners
San Bernardino County Supervisors

Dear Congressman Paul Cook, Bureau of Land Management staff, California Energy Commissioners and San Bernardino County Supervisors:

My name is Marc Greenhouse, and I am the president of the Greater Yucca Valley Kiwanis Club. As a club we are very concerned about the Soda Mountains Solar Project because it impacts an area that has been set aside for the use of future generations of American's. As Kiwanians it is our stated purpose to better the lives of Children. It is important as a recreational and educational resource that we must not do anything that would damage or destroy a treasure like the Mojave National Preserve. 45-1

We are opposed to the Soda Mountains Solar Project because of its adverse impacts to the Mojave National Preserve, Soda Mountains Wilderness Study Area, scenic vistas, water resources and the endangered tui chub, bighorn sheep migration corridors and tortoise habitat. 45-2

The Soda Mountains Solar Project would be one of the closest, if not the closest, renewable energy project located next to a national park unit. It should not be constructed in a high resource conflict area adjacent to the Mojave National Preserve, our third largest national park unit in the lower fort-eight states.

The Mojave National Preserve is a world class tourist destination that in 2010 had over 500,000 recreational visits. Those visitors spent over $13 million in gateway communities and supported over 200 full and part time jobs, demonstrating that the Preserve is a powerful economic engine, recreational haven and island of biodiversity. The Soda Mountains Solar Project jeopardizes National Park Service management goals and objectives to protect the Mojave National Preserve. We believe there is an economic, as well as an environmental imperative to protect the Preserve's scenic vistas, visitor experience, wildlife habitat and water resources. Please analyze alternatives for other locations for the Soda Mountain Solar Project and relocate it to an area that doesn't jeopardize our natural resources and our communities. 45-3

Sincerely,

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:05 AM
To: Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mtn Solar

---------- Forwarded message ----------
From: **Bob Burke** <cameracoordinator@sheepsociety.com>
Date: Tue, Feb 25, 2014 at 10:38 AM
Subject: Soda Mtn Solar
To: sodamtnsolar@blm.gov

Jeffery Childers, Soda Mountain Solar Project Manager,

Thank you for taking the time to read this E-mail, about this solar project. My name is Bob Burke, I am the Vice President of the Society for the Conservation of Bighorn Sheep and a resident of Barstow Ca. and this project will further disrupt the connection of the Bighorn Sheep between the north soda mountains' and the south soda mountains' as you may recall from the public comments meeting in Barstow there has been sheep sighting in the project area along with lots of sheep sign i.e., tracks and droppings inside the project area.

I also don't like the idea of fences anywhere in or near the project that would keep any sheep from passing through. Then, there is the question about the water in the area, there is an opportunity to greater help the Desert Bighorn Sheep reconnect in that area by the placement of Wildlife Water Sources in conjunction with California Fish & Wildlife Management Plan.

In closing, beside the view that in that area should not be disrupted on either side of the freeway as it is in the state line area where that huge plant is located.

46-1

Bob Burke
Vice President, Society for the Conservation of Bighorn Sheep
www.desertbighorn.org

Comment Letter 47

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:05 AM
To: Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: mitigation possibilities

---------- Forwarded message ----------
From: **Dave Focardi** <datawrangler81@gmail.com>
Date: Wed, Feb 26, 2014 at 4:11 PM
Subject: mitigation possibilities
To: sodamtnsolar@blm.gov

Just as habitat can be "mitigated" at 5:1 ratios, how about having the solar installed-especially panel solar- at a 1:1 ratio? Have the utilizer of my public lands be required to put up or have put up solar on rooftops/.parking lots in a ratio to help meet California's mandated renewable energy requirements?

I recently heard from Scott Flint working on the DRECP that massive public land solar will not be enough to meet CA energy needs, that rooftop as well as industrial solar will be required. Why not help get that started? 47-1

Also, if there is any way to deny this project until DRECP is issued, it would make it harder to start consturction. I know solar in the application process prior to DRECP are 'grandfathered' in, but please use some common sense here. DRECP will help fast track "not-so-bad-solar" and help prohibit bad solar, which this so obviously is. 47-2

--
Dave Focardi

Comment Letter 48

Alexandra Kostalas

From: Childers, Jeffery <jchilders@blm.gov>
Sent: Tuesday, February 25, 2014 7:01 PM
To: Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mountain project.

Jeff Childers

---------- Forwarded message ----------
From: "Ed Gala" <egala@socal.rr.com>
Date: Feb 25, 2014 3:42 PM
Subject: Soda Mountain project.
To: <jchilders@blm.gov>
Cc:

The Soda Mountain Solar Project would be located one quarter of a mile away from Mojave National Preserve and be one of the closest, if not the closest, industrial scale renewable energy projects to a national park unit in the entire southwestern United States. 48-1

The project threatens bighorn sheep migration corridors, desert tortoise habitat, scenic vistas and water quality and quantity at Mohave Chub Spring in the Mojave National Preserve, the home of the federally endangered tui chub--one of our rarest desert fish. 48-2

I urge you to work to relocate the Soda Mountain Solar Project to an area where it does not harm our national park units, natural resources, archaeological sites or desert communities. At last count, the California desert alone has over one million acres of disturbed lands or previously developed lands that may be more appropriate for solar panels and associated development. 48-3 Additionally, I respectfully request a 60 day extension on the public comment period to further analyze alternative locations for this project. 48-4

Individual solar on homes, over parking lots, industrial areas, commercial rooftops, agricultural land yes. Large scale industrial solar in pristine undeveloped or residential areas no. 48-5

Thank you for your time and consideration. Ed Gala, 2979 Valley Vista Ave. Yucca Valley, CA 92284

Basin and Range Watch

February 27th, 2014

To: Jeff Childers,
Project Manager
22835 Calle San Juan De Los Lagos,
Moreno Valley, CA, 92553
Email: sodamtnsolar@blm.gov

Subject: Please accept these comments for the Draft Environmental Impact Statement (DEIS) for the Soda Mountains Solar Project **CACA #049584**

Basin and Range Watch is a group of volunteers who live in the deserts of Nevada and California, working to stop the destruction of our desert homeland. Industrial renewable energy companies are seeking to develop millions of acres of unspoiled habitat in our region. Our goal is to identify the problems of energy sprawl and find solutions that will preserve our natural ecosystems and open spaces. We have visited the Soda Mountains Solar Energy Project site. We have hiked on the site, camped on the site and own private land within the Mojave National Preserve. Our interests and love for the Mojave National Preserve would be threatened by the approval of this project. We are concerned about the direct and cumulative impacts that the project would have on the region. 49-1

DEIS is Incomplete: The DEIS has several outstanding unresolved issues and the use of "adaptive management" may not likely cover all of the problems that have been overlooked. For this reason, the DEIS comment deadline should be delayed until BLM can provide more information for this project. Because the applicant has no Power Purchase Agreement, there should be no hurry to review the project. 49-2

Poor Pubic Review Process:

The Draft Environmental Impact Statement has made it far in the NEPA process, yet the BLM has failed to fully identify the impacts that would be created by this project and also fails to come up with adequate mitigation that would attempt to offset the impacts that would be created by approval of the project. 49-3 Furthermore, the BLM in California is not placing comments from public meetings on the record. Several groups and individuals have complained about BLM's unwillingness to record public comments at meetings. This has happened at a few meetings now concerning large renewable energy projects. By not placing oral comments on the public record, BLM is in violation of the American Disabilities Act. If someone who cannot write wants their comment on the record, there seems to be no way for them to do so. At the meeting for the Soda Mountains Project in Yucca Valley, California, you were asked by the 49-4

public to extend the comment period. These comments requesting an extension for the comment deadline were made to address the inadequacies of the DEIS. The National Environmental Policy Handbook, written by the BLM states:

"You must maintain records of public meetings and hearings including a list of attendees (as well as addresses of attendees desiring to be added to the mailing list) and notes or minutes of the proceedings. Consult 455 DM 1 for procedural requirements related to public hearings. Check individual program guidance to determine requirements for public meetings and hearings."

And:

"In many cases, people attending field trips and public meetings will be interested and/or affected parties. Make sure that you have attendance sheets that capture contact information at your field trips and meetings; these will provide you with a list of people who may want to be contacted about and involved in the NEPA process. In some cases, those affected by your proposed action may not be actively engaged in the NEPA process. In these cases, it is still important for you to reach out to those individuals, parties, or tribes, and we recommend using a variety of methods to help inform and engage those affected."…
http://www.blm.gov/pgdata/etc/medialib/blm/wo/Planning_and_Renewable_Resources/NEPS.Par.95258.File.dat/h1790-1-2008-1.pdf

The BLM is in violation of its own guidelines by not documenting public comments at meetings

49-4 cont.

Purpose and Need Statement: The BLM's Purpose and Need Statement for the Soda Mountains Draft Environmental Statement is a weak statement that ignores BLM's "need" to permit renewable energy on public lands in an environmentally responsible fashion. The statement also ignores the need to consider more environmentally friendly alternatives to the project. The statement fails to acknowledge the public request to recognize the "need" to protect wildlife, visual, cultural, public access and hydrologic resources.

The Purpose and Need Statements in many BLM large scale renewable project EIS documents reflect a need to develop so many megawatts on so many acres of public lands. All alternatives are now defined by a Need reflecting the recent Secretarial Order 3283: Enhancing Renewable Energy Development on Public Lands. The goals of Section 4 in Secretarial Order 3283 clearly state a need for environmental responsibility: *"the permitting of **environmentally responsible** wind, solar, biomass, and geothermal operations and electrical transmission facilities on the public lands;*

The Soda Mountains Solar Energy Project in its proposed location would be inconsistent with the Best Management Practices concerning the National Environmental Policy Act, the Endangered Species Act, and the Federal Lands Management Policy Act, etc and should not be considered "environmentally responsible".

The Purpose and Need Statement also states: "In accordance with Section 103(c) of the Federal Land Policy and Management Act (FLPMA) of 1976, public lands are to be managed for multiple uses that take into account the long-term needs of future generations for renewable and non-renewable resources."

49-5

There is nothing in FLPMA that states the need for renewable and non-renewable resources trumps the responsibility to protect natural, cultural and visual resources from unnecessary harm. Equally, there is nothing specific in FLPMA that points out that the project site targeted for the project needs to be developed. In fact, FLPMA stresses preservation of important resources as pointed out in Section 8 in the FLPMA Declaration of Policy: "*the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will pro-vide for outdoor recreation and human occupancy and use".*

49-5 cont.

The Purpose and Need Statement also refers to the President's climate action plan:

"The President's Climate Action Plan, announced on June 25, 2013, to reduce carbon pollution, prepare the U.S. for the impacts of climate change, and lead international efforts to address global climate change. To ensure America's continued leadership in clean energy, the Climate Action Plan set a new goal for the Department of the Interior to permit enough renewable electricity generation from public lands to power more than 6 million homes by 2020. This goal will require the approval of 20,000 MWs of renewable energy projects on the public lands by 2020."

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The climate action plan does not specifically target the Soda Mountains Solar Project site for development. In fact, any sound climate action plan would recognize the potential for 4,000 acres of established Mojave Desert habitat to sequester C02. The alluvial fans of the Soda Mountains contain thick caliche which sequesters C02.

The Soda Mountains Solar Energy site would convert up to 5 square miles of Mojave Desert habitat into a solar farm. Public land access would be extremely limited and other land use would be impaired. It would be impossible to manage these lands for multiple use when so much of the land is sacrificed for just one use.

49-7

We would like to request that the Purpose and Need statement be rewritten to include mandates to protect sensitive biological, hydrological, cultural and visual resources. We would also like the statement to include a mandate to maintain access to public lands as well as preserve in the California Desert Conservation Area.

49-8

Alternatives:

Following the guidelines of the National Environmental Policy Act, a full range of alternatives should be considered in every Environmental Impact Statement.

Also following the guidelines of the National Environmental Policy Act, the final EIS should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public. In this section agencies shall:

(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

49-9

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

(c) **Include reasonable alternatives not within the jurisdiction of the lead agency.**

(d) Include the alternative of no action.

(e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

(f) Include appropriate mitigation measures not already included in the proposed action or alternatives. We would like to request that the following alternatives be included in the Draft Environmental Impact Statement.

Under the California Environmental Quality Act, an EIR is required to examine a “reasonable range” of alternatives to the project or its location. These must include the “no project” alternative. Alternatives must be feasible, meet most of the project objectives, and reduce one or more of the project’s significant effects. 49-9

CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify an environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives. In general, the environmentally superior alternative is defined as that alternative with the least adverse impacts to the project area and its surrounding environment.

California's Renewables Portfolio Standard of achieving 33 percent renewable energy by 2020 does not say that the proposed location of the Soda Mountains Solar Energy Project is required to achieve this goal.

The BLM failed to consider a regional range of alternatives. Furthermore, The BLM has rejected reasonable alternatives because they claim none of them are “environmentally superior” or feasible for the applicant.

Many alternatives were rejected for reasons that the BLM fails to explain adequately.

Private Land Alternative: A private lands alternative has been rejected by BLM because it “does not meet BLM’s Purpose and Need to respond to the application.” Furthermore, BLM states that the applicant examined 4,853,760 acres of lands within 50 miles of the proposed ROW to determine whether a suitable private site could be found for the Project. There is a simple answer to this. Require the applicant to look for an off-site alternative further away than 50 miles from the proposed site. There is nothing written in the National Environmental Policy Act or the California Environmental Quality Act that requires an alternative to be 50 miles or less from a proposed project site. All remote utility scale projects lose power in the transmission journey. Depending on the age of the transmission line and even the heat, there can be a 7 to 15 percent power loss in transmission. Siting remote energy project will always have this problem. And wind farms in Wyoming are already sending power 1,500 miles away to 49-10

Los Angeles. A private lands alternative should be reconsidered. Or the BLM can select a No Action Alternative and justify it with a alternate location on private lands. 49-10 cont.

Brownfields and Degraded Lands Alternative: The US Environmental Protection Agency has identified over 15 million acres of brownfields in the United States that would be suitable for utility scale solar development. See here: http://www.epa.gov/brownfields/sustain.htm
The Arizona BLM is reviewing the "The Restoration Design Energy Project" http://www.blm.gov/az/st/en/prog/energy/arra_solar.html (RDEP), funded by the American Recovery and Reinvestment Act of 2009, which supports the Secretary of Interior's goals to build America's new energy future and to protect and restore treasured landscapes. The following statement is made: **"Emphasis will be on lands that are previously disturbed, developed, or where the effects on sensitive resources would be minimized. The BLM intends to use the results of the EIS to amend its land use plans across Arizona to identity areas that are considered to be most suitable for renewable energy projects.**

While these amendments will only apply to BLM-managed lands, the EIS will examine all lands in Arizona and serve as a resource to the public, policy makers, and energy planners." 49-11

BLM rejects a brownfields alternative for similar reasons to the private lands alternative. We provided you with the following alternative. It is within a reasonable distance from LA and has 24,000 acres to work with. Any transmission hookups are the responsibility of the applicant.

The Westlands Solar Park (WSP) is a Competitive Renewable Energy Zone (CREZ) identified by the Renewable Energy Transmission Initiative (RETI) located in northwestern Kings County in central California. The WSP includes the phased development of utility-scale solar PV generating facilities with a total capacity of approximately 2,400 MW on about 24,000 acres of drainage-impaired agricultural lands in the southeastern portion of the Westlands Water District. The EIR will also evaluate three planned transmission corridors in the region, which are intended to facilitate the conveyance of renewable energy. More information on the project and its goals are included in the NOP. More on the Westlands Solar Park can be seen here: www.westlandswater.org

Distributed Generation Alternative: Distributed generation in the built environment should be given more full analysis as a completely viable alternative. This project will need just as much dispatchable baseload behind it, and also does not have storage. But environmental costs are negligible with distributed generation, compared with this project. Distributed generation cannot be "done overnight," but neither can large transmission lines across hundreds of miles from remote central station plants to load centers. Most importantly, distributed generation will not reduce the natural carbon-storing ability of healthy desert ecosystems, will not disturb biological soil crusts, and will not degrade and fragment habitats of protected, sensitive, and rare species. 49-12

Germany is a distributed generation success story and has installed 22 GW of renewable energy in 2012, about 80 percent of which is in the built environment. This alternative is viable and can be integrated into the grid.

In-Depth: Germany's 22 GW Solar Energy Record Read more at http://cleantechnica.com/2012/05/31/in-depth-germanys-22-gw-solar-energy-record/#XJfxt6OcUUkdvr3S.99

The BLM calls Distributed Generation "speculative" however this should be revisited. Bill Powers has written some very informative papers about the benefits of distributed generation:

http://solardoneright.org/index.php/briefings/category/C4/

49-12 cont.

Desert Renewable Energy Conservation Plan (DRECP) Alternative: The 10,000 page Draft Environmental Impact Statement for the Desert Renewable Energy Conservation Plan is now undergoing administrative review with the BLM. It seeks to designate Conservation zones and development zones on 22 million acres in the California Desert. You were asked by several individuals and organizations to include the Soda Mountains site in the conservation focus of DRECP. You are not because you are saying that the application for this project predates DRECP. That seems like a weak reasoning. The DRECP is not ready yet. It is dealing with a very large amount of land. The DEIS process for this project should be delayed to allow negations that would incorporate this site into a conservation zone for DRECP.

49-13

For the **Conservation and Demand Side Management Alternative**, BLM states that "these efforts also do not respond to federal mandates to promote, expedite, and advance the production and transmission of environmentally sound energy resources, including renewable energy resources and in particular, cost-competitive solar energy systems at the utility scale."

The BLM's own Purpose and Need Statement requires that utility scale projects be built in an "environmentally responsible" fashion. Due to the outstanding unresolved environmental conflicts created by this project, an energy conservation alternative can be used to justify selecting a No Project Alternative.

49-14

Our preferred alternative: Choose a Conservation Alternative that designates the inappropriate for large scale solar energy. The area should be designated a conservation status.

49-15

Affected Environment/Environmental Consequences:

Air Quality:

On Page 3.2-5, the DEIS states:

"The Project site is not within the immediate vicinity of non-residential sensitive receptors (e.g., schools, hospitals, daycare centers, long-term care facilities). The closest schools are Baker Elementary, Middle, and High Schools, which are all over 6.5 miles from the Project site, in the northeastern portion of the town of Baker. The closest residences to the Project site are located adjacent to the service station on Rasor Road, approximately 230 feet southwest of the requested Project ROW (see Figure 3.2-1, which shows residence locations). The residences include a single-family residence and workforce housing for four employees."

In the Mojave Desert, fugitive dust travels further than 6.5 miles. Baker may be a small town, but over 700 people live there and fugitive dust could threaten health. This is an **Environmental Justice** issue and should be talked about in the EJ section. The DEIS fails to fully analyze the health impacts that airborne particulates from construction dust will have on the local residents of the area. These communities

49-16

include Baker, California, the Desert Studies Center at Zzyzx and Rasor Road. Coccidioidomycosis (Valley Fever) is a common issue that impacts desert communities when dust is stirred up.

Removal of stabilized soils and biological soil crust creates a destructive cycle of airborne particulates and erosion. As more stabilized soils are removed, blowing particulates from recently eroded areas act as abrasive catalysts that erode the remaining crusts thus resulting in more airborne particulates.

We are concerned that industrial construction in the region will compromise the air quality to the point where not only visual resources, but public health will be impacted.

49-16 cont.

We are also concerned that the applicant will have no choice but to use more water in an already over-drafted aquifer to control the large disturbance they intend to create.

49-17

The project will be located adjacent to the Rasor Road Off Highway Vehicle Area. Have you considered that OHV's create a lot of dust? Have you considered that this will increase the amount of water needed for panel washing?

49-18

Construction should not be permitted during days of high winds. Wind speeds of 10 MPH and higher should be determining factors that limit construction. Construction should also be limited during the hottest months of the year. Evaporation rates will be greatest during the months of June, July and August.

^Desert Sunlight Project near Desert Center, California. These dust storms were reported to be rare before the construction of the project began.

The DEIS has listed mitigation for air quality resources. The applicant will be required to apply water twice a day to new roads and other disturbances. Applying water only twice a day will not control dust, especially when temperatures climb above 44 C or 110 F evaporation will exceed the amount of water used for dust control. Any increase in water use will impact hydrological resources indicating that this is an irresponsible site to build a solar project. After Solar Trust of America was issued the ROW for their Blythe Solar Project, they started to have financial issues. Before filing for insolvency, Solar Trust bulldozed a network of roads on the site. They were watering the roads twice per day. This did not control the fugitive dust.

49-19

^Blythe Solar Power Project site, June 2011. The fugitive dust is coming from the water truck that is supposed to control the dust.

^Fugitive dust on the Ocotillo Wind Express Project was kicked up by high winds on February 28th, 2014.. Is this what we can expect for the Soda Mountains Solar Project?

Construction dust plumes from the Soda Mountains Solar Project would impact the view from the Mojave National Preserve.

49-19 cont.

Hydrology/Water Resources:

Most of the hydrological impacts will occur from dust mitigation. The BLM has failed to:

- Discuss the use of dust soil binders and dust palliatives
- Considered an alternative to water for panel cleaning.

49-20

While we request a No Project Alternative, we are surprised the BLM rejected Alternative F (No Use of Groundwater) because they claim it is not environmentally superior. The BLM claims that selecting this

49-21

alternative would create an air quality problem. The proposed alternative allows water wells and groundwater depletion. The justification is that Alternative F would create more air emissions. The DEIS does not clarify if these emissions would be fossil fuel emissions or fugitive dust. So the BLM would essentially risk removing important habitat for the Mojave tui chub in an attempt to offset more emissions? If the problem is more dust, BLM can simply require the applicant to bring more water to the site. If the problem is Greenhouse gas emissions, BLM could require the applicant to use hybrid or electric vehicles to haul the water or cleaning the panels without water.

And there actually are some ways to clean the panels without water:

^This PV cleaning robot, the Gekko G3, developed by Niederberger Engineering and built and sold by Serbot, can clean up to 400 square meters of PV module surface per hour. Photo: Niederberger Engineering AG
http://www.pv-magazine.com/archive/articles/beitrag/let-the-light-shine-through-_100005421/86/?tx_ttnews%5BbackCat%5D=192&cHash=4caddfb91d234ed7cfb8c52fa24062ef#ixzz2uak2Z2VG

49-21 cont.

The DEIS provides uncertain data on the hydrology of the groundwater supply that the applicant will be extracting:

"Recharge rates ranged from 38 percent for highly permeable rock to 0.2 percent for a system where recharge was dominated by streamflow. In systems similar to the project area and consisting of weathered and fractured granitic rock and metamorphic rock, recharge ranged from 7.8 to 8.8 percent (Panorama Environmental, Inc., 2013a). Studies within the Mojave Basin and Death Valley found that 10 percent of runoff becomes recharge (Panorama Environmental, Inc., 2013a). An estimate of 7.8 percent for mountain-front recharge is comparable to the value of approximately 10 percent of runoff becoming recharge in the Mojave Desert and is assumed for the Soda Mountain subbasin as a conservative estimate based on the results of these studies (Panorama Environmental, Inc., 2013a). "

And:

"The Soda Mountains subbasin is geographically and topographically isolated and does not receive much, if any, inflow from adjacent groundwater basins. Consequently inflow/outflow from the basin was not included in estimates of groundwater availability or recharge (Panorama Environmental, Inc., 2013a)."

49-22

While the DEIS assures there will be adequate recharge, the speculative nature of the analysis indicates that recharge is very limited in this environment. We are not convinced that this project will not tap into the fossil aquifer and like other large scale energy projects. The applicant may be underestimating their projected water use.

There is inadequate mitigation listed for impacts to groundwater resources. The project will potentially impact and impair the wetlands ecosystems of Soda Springs and threaten the federally endangered Mojave tui chub.

BLM is referring to adaptive management mitigation to deal with possible impacts to groundwater. We should remind BLM that their "adaptive management" strategy is not working out on some of their recently approved solar projects regarding avian mortality. We are concerned that the applicant will damage this aquifer before the BLM takes the appropriate action to stop them.

The applicant has provided an even worse mitigation scenario. From page 2-17 of the DEIS:

"If, as described in APM 17, the recalibrated model predicts outflow from the northeast outlet of the Valley reduced by an amount in excess of 50 AFY, the Applicant will hire a professional hydrogeologist or geologist to develop a groundwater monitoring plan for submittal to and acceptance of BLM and San Bernardino County. The groundwater monitoring plan would include monitoring and quarterly reporting of groundwater levels within the Valley, in the alluvial aquifer adjacent to Soda Spring and west of Soda Lake, and at Soda Spring during construction of the project. If the Project is shown to cause a decline in groundwater levels of 5 feet or more in the alluvial aquifer near Soda Spring, or there is a decrease in groundwater discharge at Soda Spring as a result of Project groundwater withdrawal that results in the water level in the spring decreasing to less than 4 feet deep, which would threaten the tui chub [see Section 3.4, Biological Resources – Wildlife], an evaluation would be conducted to determine if the Project is causing reduced groundwater discharge at Soda Spring. If it is determined that the Project has caused a decrease in the volume of groundwater discharged at Soda Spring such that the spring is less than four feet deep, thereby threatening the tui chub habitat, then the project shall correspondingly curtail withdrawal of groundwater and import a corresponding amount of water from outside of the Valley. Groundwater level measurements in the monitoring wells located in the Valley would be compared to the model predictions on an annual basis during construction and every five years during project operation. The groundwater model would be recalibrated if the measured drawdown values in the monitoring wells exceed the predicted values by more than 15 percent. Monitoring would cease after 5 years of operational monitoring if two conditions are met: The monitoring data support the model predictions. The model predicts the reduction in outflow from the northeast outlet will be less than 50 AFY under proposed project conditions, as detailed in APM 17. "

49-22 cont.

We would hope the BLM will use more sound mitigation and penalties against the applicant if water levels fall.

The applicant has a bunch of lawyers who would feverishly argue that it was not their project that caused a 5 foot water lever drop near Soda Springs. Mitigation should include serious warnings to the applicant that their permit will be cancelled and they will be fined if they impact the Soda Springs aquifer. We should not have to wait until there is a noticeable decline in groundwater to decide IF they are responsible.

A hydrologist should be hired by the BLM, not the applicant. There should be no bias in the conclusions of the hydrologist. The permit should be suspended if drawdown by the wells is 3 percent or more, not 15 percent. Noticeable declines of 6 inches or more at Soda Springs should be justification to suspend the permit of the applicant. Five feet is waiting too long.

At this point, we are not convinced that the BLM will take the necessary precautions to protect this aquifer.

49-22 cont.

Charging the applicant with a "Take" for the Mojave tui chub would be the responsibility of the US Fish and Wildlife Service, but BLM has a greater responsibility to prevent that from happening.

49-23

Nowhere in the Water Resources section does the analysis include Soda Spring and the valuable open water areas that are crucial to conserve the Mojave tui chub. The south array groundwater is said to apparently connect with the Mojave Wash, as its surface runoff does. Recharge is said to be low in the subbasin, less than 10%, and in multiple dry years not at all. What is the potential impact on groundwater pumping to Soda Spring, which might receive a contribution from the Soda Mountains runoff through the alluvium of the project area? Studies of how Soda Spring relates to the groundwater of the Soda Mountains needs to be done before approval of this project.

49-24

Visual Resources:

There are no adequate KOP simulations from the higher parts of the Soda Mountains from the Mojave National Preserve.

There are no adequate KOP simulations from higher points on BLM lands. These points would include the North Soda Mountains and Wilderness Study Area, Cave Mountain and other unnamed promontory points that would look over the project. The DEIS should include better KOP simulations.

The night time KOP simulation is not adequate. It is just a close up of a facility. A night time simulation should be taken from a higher point in the Mojave National Preserve. This simulation should show a 4,000 acre facility with security lighting.

49-25

Mojave National Preserve:

Visual Resources overlap with socioeconomics. Since the Mojave National Preserve (MNP) was established in 1992, it has greatly increased in popularity. Any impact to visual resources is a potential impact to tourist dollars in local communities. By approving the Ivanpah Solar Electric Generating System, the Silver State South Project and the Stateline visitor experience to the Mojave National Preserve has already been degraded. There are other energy applications surrounding the MNP. The cumulative impacts of all of these projects will degrade the visitor experience and tourism economy of the Mojave National Preserve.

As BLM is aware, the project site is highly visible from then Mojave National Preserve. The polarized lake effect, glare and tangle of transmission lines will be visible in the day, security lighting will be visible all night from the project. Dust plumes from construction will impair the view from the MNP. There is no way to mitigate or offset the visual impacts that 4,000 acres of solar panels will have on this landscape.

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The BLM admits that the project will have unmitigable impacts on visual resources. They also classify the region as a Class III Visual Resource Management region. A Class III is defined as *"objective is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements of form, line, color, and texture found in the predominant natural landscape features."*

The facility would be so visually intrusive, it would not even meet the standards of VRM Class III. Taking up to 6 square miles, management activities will no doubt dominate the view! The facility would fall more into the category of VRM Class IV: *"objective is to provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high."*

The Silver State South Solar Project required a down- grade of the VRM class so the facility would fit more into the BLM's Las Vegas Resource Management Plan. By allowing Class IV style development in a Class III VRM Zone, BLM should have to revise the Resource Management Plan.

We would also like to request that BLM re-evaluate the entire site for VRM II and even VRM I standards. Because the project is so large (six square miles of disturbance) the BLM's VRM Class ratings are not good enough to define the whole area visually. The project will impact areas of different designated BLM VRM classes.

49-26 cont.

Biological Resources:

Biological Soil Crust: On 5 separate site visits to the project site, we have identified biological soil crust. The DEIS should have evaluated the amount of C02 that the soil crusts on the site can sequester and what kind of impacts so much physical removal of soil crust will have on the overall big picture relating to climate change.

49-27

Crucifixion-thorn mitigation:

On Page 3.3-22, the DEIS says:

"To the extent feasible, the Project will be designed to avoid impacts to the Emory's crucifixion-thorn population within the project ROW. No construction shall be allowed within a 100-foot buffer area around the Emory's crucifixion-thorn population. All other California Rare Plant Rank (CRPR) 1 and 2 plant occurrences within the Project ROW will be documented during preconstruction surveys. The Applicant will also provide a 100-foot buffer area surrounding each avoided occurrence, in which no construction activities will take place, if feasible. If avoidance is not feasible, the Applicant will provide on-site mitigation (e.g., vegetation salvage) for impacts to rare plants."

49-28

This does not insure an ecological healthy population of these plants. By cutting off connectivity for pollinators and seed dispersers, these populations could eventually die off.

The plan will not allow the use of herbicides near the crucifixion-thorn population, but will allow the use of herbicides on just about all of the other 4,000 acres.

Herbicides to Control Invasive Plants:

49-29

The herbicide of choice is most likely going to be Glyphosate (Roundup).

While Roundup is a common herbicide, it is usually not used in such large quantities at one time. Glyphosate can be hazardous to human health as identified in studies:

"Symptoms of exposure to glyphosate include eye irritation, blurred vision, skin rashes, burning or itchy skin, nausea, sore throat and difficulty breathing, headache, lethargy, nose bleeds and dizziness.

In lab tests, glyphosate and herbicides containing glyphosate caused genetic damage to human and animal cells.

Studies of farmers and other people exposed to glyphosate herbicides link this exposure to increased risks of cancer, miscarriages and attention deficit disorder.

Additional laboratory tests have confirmed the results of these studies. Laboratory evidence indicates that glyphosate herbicides can reduce production of sex hormones.

Application of glyphosate herbicides increases the severity of a variety of plant diseases.

Studies of glyphosate contamination of water are limited, but new results indicate that it can easily contaminate streams in both agricultural and urban areas.

Glyphosate herbicides cause more off-target damage incidents than all but one other herbicide — 2, 4-D. Glyphosate herbicides cause genetic damage and harm to the immune system in fish. In frogs, glyphosate herbicides cause genetic damage and abnormal development."

Glyphosate has also been linked to a decline of Monarch butterflies in Mexico and the USA.

In particular, glyphosate has impacted populations of Asclepias (milkweed).

Populations of common species of Asclepias such as *(Asclepias fascicularis)* occur on the site as well as rare species such as Utah milkweed ***(****Asclepias speciosa****).*** Monarchs use milkweed as a food plant.

So how will the BLM mitigate the impacts of the use of so much glyphosate? What other plants will be impacted? A list should be provided. How will the removal and development of this site impact migrating Monarch butterfly populations? What effects will herbicides have on adjacent species in the Mojave National Preserve.

If glyphosate infiltrates the groundwater supply, what impacts would this have on the Soda Springs complex and the life that lives there?

Please develop a "Physical Removal Only" alternative to using glyphosate for invasive plants.

49-29 cont.

Mohave tui chub (*Gila bicolor mohavensis*): We are saddened to read that the BLM would gamble with one of the 4 populations of this species that are remaining. The BLM admits that the hydrology of the region is not understood and has not figured out exactly where the water comes from, but at the same time concludes the project would have no impact on the species. The BLM will not even consider an

49-30

alternative that requires the applicant to bring in their water. Please do more groundwater studies for this project. 49-30 cont.

Mojave fringe-toed lizard *(Uma scoparia)*

A possible connectivity corridor between populations of MFTL may be cut off by the southern solar array, between the Mojave River sand fields and sand areas to the west of the project. In addition, surveys make no attempt to map out or investigate potential movement habitat which may be less sandy but be used by lizards to cross flat desert valleys to access the best sand sites. We have seen Uma use these habitats in Chuckwalla Valley adjacent to typical sand flats and dunes. Small sand blowups on mountain slopes in the area should also be searched. On page E.1-48, this type of habitat and soil type is described which should be surveyed for MFTL:

> *"...the southeastern region contains Rositas soils, which consist of very deep, somewhat excessively drained soils formed in sandy aeolian material. Rositas soils occur on dunes and sand sheets with slope ranging from 0 to 30 percent and a hummocky or dune micro-relief (URS 2009c). "*

49-31

Since fringe-toed lizards can be abundant on relatively small acreages, an estimate of how many individuals would be killed on the 5 acres would be helpful.

The sand transport map provided on page E.1-73 appears to us that the west to east prevailing winds could provide sand transport, but DEIS says there would not be favorable wind to create Aeolian transport. We believe that could be studied better for a possible different conclusion.

Desert Tortoise: While the project site is low in elevation, it still can support a small population of tortoises. The site provides a connectivity corridor for tortoises and can be abundant in wildflowers during an El Nino year. The DEIS states that the site provides 2,450 acres of desert tortoise habitat. This is how much will be lost if BLM issues a ROW for this project. 49-32

For direct impacts, the DEIS fails to identify illegal activity associated with hundreds of workers. It does happen. Not everyone who gets hired on one of these projects loves the desert tortoise and vandalism occurs. 49-33

For indirect impacts, the DEIS fails to identify stress, isolation and habitat fragmentation as catalysts for stress which can bring disease out in desert tortoises. 49-34

The DEIS fails to identify the combined cumulative impacts that a large solar farm and climate change would have on the local micro climate. At the recent Desert Tortoise Symposium in Ontario, California, Dr. Barry Sinervo, an evolutionary biologist from UC Santa Cruz, presented research that suggested that the very development of solar projects in arid regions facing a warming future will cumulatively add to the "local" heat index.

Sinervo states: *"We find that solar farms accelerate predicted extinctions by 50 years. Therefore, populations of Gopherus adjacent to solar farms may go extinct even before benefits of solar farms are realized (e.g., by 2080). In addition, the siting of solar projects in the Ivanpah Valley or near California City threatens the only habitat predicted to sustain population demography in 2080, effectively eliminating climate refuges for G. agassizii."*

49-35

And:

"We emphasize that while prospects look bleak for Gopherus it can be rescued from climate-forced extinction with aggressive limits on CO_2 input into the atmosphere. However, current and proposed solar projects will only hasten extinctions and likely eliminate the last remaining refuges for Gopherus from climate warming."

He is saying that these developments will cause climatic effects that may expedite the extinction of desert tortoises by up to 50 years.

49-35 cont.

The Soda Mountains Site supports a small tortoise population as it is. It faces warm temperatures. If Sinervo's predictions are accurate, this could cause a local extinction of desert tortoises in the region.

The BLM should revisit this issue and develop a supplemental Environmental Assessment to examine the long term impacts this development will have on desert tortoises.

The abstract for the lecture can be viewed here:
http://www.deserttortoise.org/symposium/2014Abstracts.pdf

Desert Bighorn Sheep *(Ovis canadensis nelsoni)*

On page E.1-80, the DEIS quotes a version of the DRECP as saying the project area known as Soda Mountain Valley is "not mountain or intermountain bighorn sheep habitat". Yet on the previous page of the DEIS it was admitted a bighorn was recorded on the project site! If a sheep is on a site, that site is sheep habitat, even if it is not commonly used. Therefore we disagree with the DRECP designation.

The DEIS is also quoted in several sections stating that this project will have impacts on bighorn sheep that will be major.

49-36

We agree with John Wehausen, referenced on page E.1-84, that the Soda Mountain Valley is important connectivity habitat:

"The DRECP identifies critical linkage areas at potential highway crossing locations along I-15 and I-40 using the expert opinion of John Wehausen (CEC 2012b). The entire Soda Mountain valley, including the project site and the surrounding mountains, is designated as a critical linkage in the DRECP ..."

^photo of bighorn ewe crossing between mountain ranges near the Last Chance Range, Nye County, Nevada

We disagree therefore, that this is not habitat for bighorn sheep, and need not have well-used trails or other sign. We have seen lone bighorn sheep, especially rams, traveling along interstate highways looking for crossing points in valley and low hill habitats between mountain ranges. Such long-range movements would not leave trails but are very important for maintaining genetic flow between populations. The I-15 under crossings are viable movement corridors that should be left open and easily accessible without further development and disturbance, noise and human population.

Opah Ditch would fit such a connectivity point well in our opinion, for occasional use by bighorn following fence lines along highways until they find a crossing. We have observed this in other parts of bighorn range where a single ram was running along a highway fence in areas far from steep terrain, looking to cross. The project should be denied in this important crossing area for I-15.

49-36 cont.

Solar Farm Avian Slaughter/Polarized Glare/Lake Effect:

The Soda Springs complex supports a large list of avian wildlife.

A whole list of birds that occupy the wetlands can be seen here on the web page for the Desert Studies Center.

Water birds may use the Soda Springs to move between several desert wetlands including Grimshaw Lake, Saratoga Springs, and Ash Meadows National Wildlife Refuge.

The polarized “lake effect” is now well known from the Genesis, Desert Sunlight and Ivanpah Projects. Bird species that have collided (or dehydrated) with solar panels and heliostats include the Endangered Yuma clapper rail, peregrine falcon , American kestrel and a host of water birds.

At this point, those are among the few projects that are reporting findings of dead birds at their sites.

49-37

Here is the official list compiled by Rewire : http://www.kcet.org/news/rewire/solar/water-birds-turning-up-dead-at-solar-projects-in-desert.html

Genesis, March 13, lesser goldfinch
Genesis, March 19, lesser goldfinch
Genesis, March 28, bufflehead
Desert Sunlight, April 3 eared grebe
Desert Sunlight, April 15 surf scoter
Genesis, April 17, black-throated grey warbler
Genesis, April 17, house wren
Genesis, April 17, orange-crowned warbler
Desert Sunlight, April 18 great-tailed grackle
Desert Sunlight, Week of April 21 red breasted merganser

Genesis, April 25, barn owl injured, taken to rehab
Genesis, May 1, pied-billed grebe
Genesis, May 1, eared grebe* injured, to rehab
Desert Sunlight, May 6 double crested cormorant
Desert Sunlight, May 8 Yuma clapper rail
Genesis, May 8, Wilson's warbler (poss. line strike)
Genesis, May 14, yellow-headed blackbird* injured, taken to rehab
Genesis, May 15, hermit thrush (bulldozer)
Genesis, May 16, Wilson's warbler
Genesis, May 16, Townsends warbler
Genesis, May 16, unidentified bird
Genesis, May 22, western grebe injured, taken to rehab
Genesis, May 22, yellow warbler
Genesis, May 23, warbler, species unknown
Genesis, May 24, unidentified sparrow
Genesis, May 30, American coot
Desert Sunlight, June 4, common loon
Desert Sunlight, June 5, eared grebe
Desert Sunlight, June 5, western grebe
Desert Sunlight, June 5, western grebe live, released after consultation.
Desert Sunlight, June 6, American coot
Desert Sunlight, June 6, double crested cormorant
Desert Sunlight, June 9, Common raven
Genesis, June 10, brown pelican- injured, sent to rehab
Desert Sunlight, June 19, hummingbird
Genesis, July 10, brown pelican
Desert Sunlight, July 10, brown pelican
Desert Sunlight, July 11, brown pelican
Desert Sunlight, July 13, brown pelican
Desert Sunlight, July 15, black-crowned night heron

In early September, 2013, a peregrine falcon was injured badly (burned is what they say) on the Ivanpah Project and later died in rehabilitation. The August compliance reports for the Ivanaph Solar Electric Generating System confirm 7 bird kills on the project site. The reports can be viewed here:

49-37 cont.

http://docketpublic.energy.ca.gov/PublicDocuments/07-AFC-05C/TN200540_20130920T095831_August_2013_MCR.pdf

Since there would be no solar flux burning at Soda Mountains, the threats would be to birds colliding a dehydrating by getting deceived by the lake effect. The threats would be both at day and at night. Night time would potentially be the biggest threat to moving water birds.

The only real organized surveys for avian mortality are taking place at the Ivanpah Solar Project with only a 20 percent coverage. The rest of the finds are simply incidental which may indicate that mortality numbers are far greater than being reported.

The soon to be approved Blythe Solar Power Project would be a 4,000 acre PV facility near the Colorado River near Blythe, California.

At a hearing for the California Energy Commission, there were interveners. LABORERS' INTERNATIONAL UNION OF NORTH AMERICA had biologist Shawn Smallwood estimate a number of birds that would be killed for one of the Interveners to the project. He estimated that over 2,100 birds would be killed per year by the 4,000 acre Blythe Solar Power Project. The estimate can be viewed here: http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-06C/TN201152_20131108T155000_Testimony_of_K_Shawn_Smallwood_PhD.pdf

49-37 cont.

The BLM should have a similar estimate prepared for the Soda Mountains Project before this review process is allowed to continue.

A monitoring plan should look for birds at full coverage no less than twice a week.

What mitigation is being discussed? Can single axis tracking units be turned upside down? Can the bottoms of the panels be painted a texture that will be non-reflective to where they will not attract birds at day or night? Has a curtailment option (turning panels upside down) been discussed for spring migration periods?

Has other mitigation been discussed? Such as placing horizontal bars across the panels to disrupt the lake effect?

Since there so little know information about the polarized lake effect, we do not believe the BLM is ready to review a project like this that lies so close to a Mojave Desert wetlands. This is reason to select a No Action Alternative.

Other Wildlife:

The project will remove habitat for the desert kit fox, the burrowing owl and the American badger, all of which have suffered impacts from large scale energy projects. The project will remove foraging habitat for bats, golden eagles and other raptors.

49-38

Desert Pavement:

49-39

Desert Pavements are fragile geologic formations and can be damaged by even footsteps and will not recover in our lifetime. They can be tens of thousands of years old. The south project site has some very old desert pavement formations. These geologic formations should be recognized and preserved on Mojave Desert public lands, not developed for short term gain.

49-39 cont.

Conclusion:

The Soda Mountains Solar Project will destroy another part of the Mojave Desert and impact the Mojave National Preserve. It will impact desert wildlife and threaten Mojave Desert wetlands. This is the wrong location for this project. Please select a No Action Alternative for this project and protect the region with a conservation status.

49-40

Thanks,

Kevin Emmerich

Laura Cunningham

Basin and Range Watch

P.O. Box 70

Beatty, NV 89003

January 27, 2014

Bechtel Corporate Headquarters

Attn: Andy Greig

50 Beale Street

San Francisco, California

United States, 94105-1875

Dear Mr. Greig,

My name is Kellie King, and I currently reside in the beautiful area of Joshua Tree, California. As someone who is aware of the ecological proposals in the area in which I live, it is my understanding that there is a proposed solar project projected to be built in the Soda Mountains of the Mojave National Preserve. I am against this proposal due to its obvious flaws and formidable potential to wreak havoc on the surrounding ecosystem.

I am opposed to the Soda Mountains Solar Project due to its adverse to the Mojave National Preserve, Soda Mountains Wilderness Study Area, scenic views, water resources, and the endangered species residing in the area.

The Soda Mountains would be one of the closest, if not the closest, renewable energy projects located next to a national park unit. The project should not be constructed in such a conflicting area adjacent to the Mojave National Preserve. The area is a biological hotspot thriving with keystone species that are imperative to the successful and proper functioning of the ecosystem.

The Mojave National Preserve is a world-class tour destination that, in 2010, had over 500,000 tourist visits. The preserve proves to be both a recreational haven as well as a flourishing island of biodiversity. The implantation of solar energy projects would destroy this biodiversity, as well as the simplistic beauty that is the Soda Mountains. As a longtime resident of the desert, I am able to fully embrace its beauty and overwhelming majesty, which many outsiders cannot yet see. I support solar energy, but not in this fashion. I believe there is an economic as well as an environmental imperative to protect the Preserve's scenic vistas, visitor experience, wildlife habitat, and water resources. I genuinely hope you will consider this in your course of action, and remember the lives being affected by this project.

50-1

Sincerely,

Kellie King

60225 Chesapeake Dr.

Joshua Tree, CA 92252

Sidney Silliman
1225 Adriana Way
Upland, CA 91784

March 1, 2014

Via Email and U.S. Mail

Jeffrey Childers, Project Manager
California Desert District Office
Bureau of Land Management
22835 Calle San Juan de los Lagos
Moreno Valley, CA 92553
sodamtnsolar@blm.gov

Re: Draft Joint Environmental Impact Statement and Environmental Impact Report and California Desert Conservation Area Plan Amendment for the Proposed Soda Mountain Solar Project, San Bernardino County, California

Dear Mr. Childers:

My comments on the Draft Joint Environmental Impact Statement and Environmental Impact Report and California Desert Conservation Area Plan Amendment for the Soda Mountain Solar project are submitted as a resident of San Bernardino County and as a frequent visitor to the Mojave desert region. My concerns regarding the proposed project were expressed at the Soda Mountain Solar Project Stakeholder meeting in Barstow on December 12, 2012, and at the public meeting on January 9, 2014, also in Barstow.

Restrictions On Public Participation

Bureau of Land Management (BLM) failed to record public comments at the meetings of January 8, 9 and 11, even though its web site announced that the Bureau and the County of San Bernardino had scheduled "public meetings for public comment" on the project's draft environmental documents. My understanding is that the California Desert District Manager decided not to take note of public comments. Not recording commentary from interested citizens who travel great distances to participate makes a mockery of holding "public meetings" and is probably illegal. BLM restrictions on public participation in this instance certainly violates President Barak Obama's commitment to "…creating an unprecedented level of openness in government." As the President stated:

> We will work together to ensure the public trust and establish a system of transparency, public participation and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in government."

51-1

BLM failed at the public meeting of January 9 to provide descriptions and visual representations of each alternative in the Draft EIS/EIR/CDCA Plan Amendment. Each of the seven alternatives should have been presented during the meeting. In particular, the Bureau failed to display information regarding Alternatives E and G, alternatives that merit analysis because they would protect valued resources on public lands and the resources of Mojave National Preserve. 51-1 cont.

Environmental Concerns

I have significant concerns regarding potential impacts to the federally-listed endangered species and California species of special concern, loss of wildlife connectivity (especially for desert bighorn sheep), habitat de-fragmentation, view shed degradation, and groundwater. These concerns are not adequately addressed in the Draft EIS/EIR/CDCA Plan Amendment. 51-2

Direct and indirect impacts associated with the project have potential to impact the resources of Mojave National Preserve, resources that have been mandated by the Organic Act of 1916 and the California Desert Protection Act of 1994 to be protected by the Preserve. These impacts are not adequately accounted for in the Draft EIS/EIR/CDCA Plan Amendment. 51-3

The sections of the Draft EIS/EIR/CDCA Plan Amendment pertaining to project impacts to groundwater are wholly inadequate. There is little or no date supporting BLM assertions as to potential impacts on water; indeed, there is no formal study of the likely impacts presented in the Draft. On pages 3.19-7 and 3.19-8, BLM relies only on "estimates" of subbasin storage and "experience elsewhere" with respect to recharge rates. The absence of reliable data and good science is of special concern because the springs at Zzyzx lie less than one mile from the project site and include MC Spring, habitat for the source population of the endangered Mohave tui chub, listed as endangered under both the federal Endangered Species Act and the California Endangered Species Act. 51-4

BLM must adequately address these and other concerns in a revised Draft EIS/EIR, circulate the revised document for public comment, and ensure that comments at public meetings are recorded 51-5

Preferred Alternative

Should BLM choose not to revise the Draft EIS/EIR, it should select Alternative G as the preferred alternative. This is the only option that would protect resources at the proposed site and in the Mojave National Preserve. 51-6

The petition to the Obama Administration (http://wh.gov/lUxYt) urging that it "protect Mojave National Preserve by denying Bechtel's request for a public land grant to build its Soda Mountain Solar" demonstrates wide-spread support for a "No Action/No Project" alternative like Alternative G. To date, the petition on the White House web site (http:/WhiteHouse.gov) has been signed by 470 people. The petition request is supported as follows: 51-7

> Bechtel proposes to build Soda Mountain Solar on 4,179 acres of public land adjacent to Mojave National Preserve, threatening the resources and landscape of this treasured unit of the National Park System.

Soda Mountain will interfere markedly with the habitat corridor linking Joshua Tree and Death Valley National Parks.

The environmental impacts of Soda Mountain include decreased spring discharge at Zzyzx, loss of habitat for the endangered Mohave tui chub, loss of high-quality desert tortoise habitat, increased habitat fragmentation for desert bighorn sheep, and loss of wildlife connectivity with nearby wilderness areas.

Soda Mountain will obstruct dramatic views into the Preserve and degrade the dark skies experience of the park's 550,000 annual visitors.

51-7 cont.

Sincerely,

G. Sidney Silliman/s

We The People Petition (http://wh.gov/lUxYt)
Soda Mountain Solar Project

March 1, 2014

Via Email and U.S. Mail

Jeffrey Childers, Project Manager
California Desert District Office
Bureau of Land Management
22835 Calle San Juan de los Lagos
Moreno Valley, CA 92553
sodamtnsolar@blm.gov

Re: Draft Joint Environmental Impact Statement and Environmental Impact Report and California Desert Conservation Area Plan Amendment for the Proposed Soda Mountain Solar Project, San Bernardino County, California

Dear Mr. Childers:

I am pleased to submit for the official record a petition (http://wh.gov/lUxYt) requesting the Obama Administration to "protect Mojave National Preserve by denying Bechtel's request for a public land grant to build its Soda Mountain Solar." The petition was created on We The People (WhiteHouse.gov) on February 13, 2014, and, to date, has been signed by 472 people.

The petition request and its supporting arguments are hereby submitted to BLM as public comments on the Draft EIS/EIR/CDCA Plan Amendment:

> Bechtel proposes to build Soda Mountain Solar on 4,179 acres of public land adjacent to Mojave National Preserve, threatening the resources and landscape of this treasured unit of the National Park System.
>
> Soda Mountain will interfere markedly with the habitat corridor linking Joshua Tree and Death Valley National Parks.
>
> The environmental impacts of Soda Mountain include decreased spring discharge at Zzyzx, loss of habitat for the endangered Mohave tui chub, loss of high-quality desert tortoise habitat, increased habitat fragmentation for desert bighorn sheep, and loss of wildlife connectivity with nearby wilderness areas.
>
> Soda Mountain will obstruct dramatic views into the Preserve and degrade the dark skies experience of the park's 550,000 annual visitors.

The petition is signed by individuals in all of regions of the United States (east and west, north and south). Support for the petition and opposition to Solar Mountain Solar is growing daily.

51-7 cont.

It is assumed that the Bureau, as an agency of the Obama Administration, would grant the petition's request by selecting "Alternative G as the preferred alternative among those presented in the Draft EIS/EIR/CDCA Plan Amendment. As the petition urges, BLM would not issue a right-of-way grant to the Bechtel Corporation for construction of the Soda Mountain solar project. In addition, the CDCA Plan would be amended to identify the requested right-of-way area as unsuitable for solar development. San Bernardino County would not approve a groundwater well permit.

51-7 cont.

Sincerely,

G. Sidney Silliman/s
1225 Adriana Way
Upland, CA 91784

Cc: Secretary Sally Jewell

WE PETITION THE OBAMA ADMINISTRATION TO:

protect Mojave National Preserve by denying Bechtel's request for a public land grant to build its Soda Mountain Solar.

Bechtel proposes to build Soda Mountain Solar on 4,179 acres of public land adjacent to Mojave National Preserve, threatening the resources and landscape of this treasured unit of the National Park System.

Soda Mountain will interfere markedly with the habitat corridor linking Joshua Tree and Death Valley National Parks.

The environmental impacts of Soda Mountain include decreased spring discharge at Zzyzx, loss of habitat for the endangered Mohave tui chub, loss of high-quality desert tortoise habitat, increased habitat fragmentation for desert bighorn sheep, and loss of wildlife connectivity with nearby wilderness areas.

Soda Mountain will obstruct dramatic views into the Preserve and degrade the dark skies experience of the park's 550,000 annual visitors.

51-7 cont.

Created: Feb 13, 2014

Issues: Energy, Environment, Natural Resources

Learn about Petition Thresholds

SIGNATURES NEEDED BY MARCH 15, 2014 TO REACH GOAL OF 100,000 **99,509**

TOTAL SIGNATURES ON THIS PETITION **491**

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Signatures: 491 of 491

CREATOR
S. S.
Upland, CA
February 13, 2014
Signature # 1

R. R.
Norman, OK
March 03, 2014
Signature # 491

M. D.
Strattanville, PA
March 03, 2014
Signature # 490

V. S.
Miami, FL
March 03, 2014
Signature # 489

R. B.
Bronx, NY
March 02, 2014
Signature # 488

D. T.
Rancho Cucamonga, CA
March 02, 2014
Signature # 487

D. H.
March 02, 2014
Signature # 486

D. B.
Williamsport, PA
March 02, 2014
Signature # 485

J. C.
Greenwood Lake, NY
March 02, 2014
Signature # 484

K. V.
Phelan, CA
March 02, 2014
Signature # 483

M. P.
March 02, 2014
Signature # 482

M. S.
Yucca Valley, CA
March 02, 2014
Signature # 481

C. F.
March 02, 2014
Signature # 480

B. H.
Nottingham, MD
March 02, 2014
Signature # 479

O. P.
Landers, CA
March 02, 2014
Signature # 478

A. M.
Hemet, CA
March 01, 2014
Signature # 477

M. G.
Rialto, CA
March 01, 2014
Signature # 476

G. T.
March 01, 2014
Signature # 475

B. B.
Barstow, CA
March 01, 2014
Signature # 474

M. B.
Long Beach, CA
March 01, 2014
Signature # 473

K. H.
El Cerrito, CA
March 01, 2014
Signature # 472

C. W.
Wenham, MA
March 01, 2014
Signature # 471

G. V.
Daytona Beach, FL
March 01, 2014
Signature # 470

J. R.
March 01, 2014
Signature # 469

51-7 cont.

G. A.
Catonsville, MD
March 01, 2014
Signature # 468

A. S.
Danielson, CT
March 01, 2014
Signature # 467

C. S.
San Jose, CA
February 28, 2014
Signature # 466

T. S.
Seattle, WA
February 28, 2014
Signature # 465

C. D.
Los Angeles, CA
February 28, 2014
Signature # 464

M. G.
Berkeley, CA
February 28, 2014
Signature # 463

L. B.
San Francisco, CA
February 28, 2014
Signature # 462

J. D.
Harold, FL
February 28, 2014
Signature # 461

B. C.
Bolingbrook, IL
February 28, 2014
Signature # 460

E. H.
Los Angeles, CA
February 28, 2014
Signature # 459

J. S.
February 28, 2014
Signature # 458

M. P.
San Jose, CA
February 28, 2014
Signature # 457

M. G.
Houston, TX
February 28, 2014
Signature # 456

A. W.
Des Moines, IA
February 28, 2014
Signature # 455

P. B.
Stuttgart, AR
February 28, 2014
Signature # 454

A. R.
February 28, 2014
Signature # 453

L. T.
Lompoc, CA
February 28, 2014
Signature # 452

K. F.
February 28, 2014
Signature # 451

A. A.
Mays Landing, NJ
February 28, 2014
Signature # 450

M. S.
Alpharetta, GA
February 28, 2014
Signature # 449

C. A.
Tollhouse, CA
February 28, 2014
Signature # 448

S. O.
New York, NY
February 28, 2014
Signature # 447

S. R.
Millbrae, CA
February 28, 2014
Signature # 446

M. H.
Palm Springs, CA
February 28, 2014
Signature # 445

J. V.
Canoga Park, CA
February 28, 2014
Signature # 444

C. K.
Pasadena, CA
February 28, 2014
Signature # 443

P. N.
Warner Springs, CA
February 28, 2014
Signature # 442

K. F.
Seattle, WA
February 27, 2014
Signature # 441

C. O.
Fairfield, OH
February 27, 2014
Signature # 440

S. M.
Los Angeles, CA
February 27, 2014
Signature # 439

D. K.
Davenport, CA
February 27, 2014
Signature # 438

B. P.
Trenton, MI
February 27, 2014
Signature # 437

I. B.
Seattle, WA
February 27, 2014
Signature # 436

W. R.
Bellingham, WA
February 27, 2014
Signature # 435

E. F.
San Francisco, CA
February 27, 2014
Signature # 434

L. K.
Huntington Beach, CA
February 27, 2014
Signature # 433

51-7 cont.

B. T.
Fairmont, WV
February 27, 2014
Signature # 432

T. I.
Portland, OR
February 27, 2014
Signature # 431

L. L.
Fort Worth, TX
February 27, 2014
Signature # 430

G. R.
Morgan Hill, CA
February 27, 2014
Signature # 429

L. W.
South Pasadena, CA
February 27, 2014
Signature # 428

S. W.
Bisbee, AZ
February 27, 2014
Signature # 427

B. T.
February 27, 2014
Signature # 426

H. E.
Melissa, TX
February 27, 2014
Signature # 425

B. H.
Washington, DC
February 27, 2014
Signature # 424

J. E.
Seattle, WA
February 27, 2014
Signature # 423

R. B.
Alta Loma, CA
February 27, 2014
Signature # 422

V. B.
Las Cruces, NM
February 27, 2014
Signature # 421

S. J.
Riverdale, MD
February 27, 2014
Signature # 420

N. B.
Saunemin, IL
February 27, 2014
Signature # 419

M. H.
Knoxville, TN
February 27, 2014
Signature # 418

V. C.
February 27, 2014
Signature # 417

T. M.
February 27, 2014
Signature # 416

S. F.
Walnut, CA
February 27, 2014
Signature # 415

E. W.
Cleveland, TN
February 27, 2014
Signature # 414

D. G.
Phelan, CA
February 27, 2014
Signature # 413

E. P.
Homestead, FL
February 27, 2014
Signature # 412

D. T.
Arlington, TX
February 27, 2014
Signature # 411

G. L.
Bensenville, IL
February 27, 2014
Signature # 410

A. M.
Indianapolis, IN
February 27, 2014
Signature # 409

J. W.
Longview, TX
February 27, 2014
Signature # 408

C. M.
Annandale, VA
February 27, 2014
Signature # 407

J. B.
Mount Kisco, NY
February 27, 2014
Signature # 406

C. T.
February 27, 2014
Signature # 405

C. H.
Warren, MI
February 27, 2014
Signature # 404

L. S.
Ridgecrest, CA
February 26, 2014
Signature # 403

M. K.
Escondido, CA
February 26, 2014
Signature # 402

S. J.
February 26, 2014
Signature # 401

N. K.
West Bend, WI
February 26, 2014
Signature # 400

M. P.
February 26, 2014
Signature # 399

C. K.
Urbandale, IA
February 26, 2014
Signature # 398

G. H.
Youngstown, FL
February 26, 2014
Signature # 397

L. H.
February 26, 2014
Signature # 396

J. F.
Saint Louis, MO
February 26, 2014
Signature # 395

潘. 潘.
February 26, 2014
Signature # 394

M. K.
Norristown, PA
February 26, 2014
Signature # 393

C. O.
Twentynine Palms, CA
February 26, 2014
Signature # 392

K. G.
Chicago, IL
February 26, 2014
Signature # 391

J. K.
Huntington, NY
February 26, 2014
Signature # 390

D. C.
Sidney, NE
February 26, 2014
Signature # 389

R. V.
Dallas, TX
February 26, 2014
Signature # 388

C. R.
Levittown, NY
February 26, 2014
Signature # 387

R. D.
February 26, 2014
Signature # 386

A. B.
February 26, 2014
Signature # 385

M. W.
Sonora, CA
February 26, 2014
Signature # 384

I. G.
Gaithersburg, MD
February 26, 2014
Signature # 383

S. M.
Bradenton, FL
February 26, 2014
Signature # 382

A. P.
Ridgecrest, CA
February 26, 2014
Signature # 381

51-7 cont.

K. R.
Humboldt, AZ
February 26, 2014
Signature # 380

A. C.
February 26, 2014
Signature # 379

A. A.
Elmira, NY
February 26, 2014
Signature # 378

E. K.
Tecumseh, NE
February 26, 2014
Signature # 377

M. M.
North Adams, MA
February 26, 2014
Signature # 376

S. K.
Milwaukee, WI
February 26, 2014
Signature # 375

M. C.
February 26, 2014
Signature # 374

L. H.
February 26, 2014
Signature # 373

N. H.
Lusby, MD
February 26, 2014
Signature # 372

R. M.
Dearborn, MI
February 26, 2014
Signature # 371

K. M.
Derby, KS
February 26, 2014
Signature # 370

A. D.
Clarkston, MI
February 26, 2014
Signature # 369

J. F.
San Bernardino, CA
February 26, 2014
Signature # 368

M. B.
Prescott, AZ
February 25, 2014
Signature # 367

P. M.
Scott City, MO
February 25, 2014
Signature # 366

B. B.
Alexandria, VA
February 25, 2014
Signature # 365

S. J.
Tuscaloosa, AL
February 25, 2014
Signature # 364

M. E.
Imperial, MO
February 25, 2014
Signature # 363

N. D.
February 25, 2014
Signature # 362

L. M.
Saratoga, CA
February 25, 2014
Signature # 361

T. S.
West Chester, PA
February 25, 2014
Signature # 360

E. B.
Dayton, OH
February 25, 2014
Signature # 359

K. F.
Phoenix, AZ
February 25, 2014
Signature # 358

B. C.
Jackson, MO
February 25, 2014
Signature # 357

A. S.
Clinton, WI
February 25, 2014
Signature # 356

J. H.
Republic, MI
February 25, 2014
Signature # 355

S. R.
Buena Park, CA
February 25, 2014
Signature # 354

J. S.
Springdale, UT
February 25, 2014
Signature # 353

S. R.
Houston, TX
February 25, 2014
Signature # 352

R. P.
Boyds, MD
February 25, 2014
Signature # 351

M. E.
Minneapolis, MN
February 25, 2014
Signature # 350

C. R.
February 25, 2014
Signature # 349

S. C.
Fort Myers, FL
February 25, 2014
Signature # 348

O. C.
New Buffalo, MI
February 25, 2014
Signature # 347

J. V.
Reading, PA
February 25, 2014
Signature # 346

P. T.
Hatfield, PA
February 25, 2014
Signature # 345

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S. G.
Santa Clara, CA
February 25, 2014
Signature # 344

M. F.
February 25, 2014
Signature # 343

R. V.
New York, NY
February 25, 2014
Signature # 342

L. B.
Lombard, IL
February 25, 2014
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W. J.
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B. C.
Atlanta, GA
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K. H.
Santa Fe, NM
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R. F.
Apison, TN
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Signature # 337

T. W.
Guthrie, OK
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C. S.
Downers Grove, IL
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A. V.
Mason, OH
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T. F.
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Y. N.
February 25, 2014
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S. M.
Dillsburg, PA
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Signature # 331

J. M.
Chicago, IL
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Signature # 330

A. T.
Warrensburg, MO
February 25, 2014
Signature # 329

D. H.
Franklin, MA
February 24, 2014
Signature # 328

S. C.
Anaheim, CA
February 24, 2014
Signature # 327

D. G.
Columbia, SC
February 24, 2014
Signature # 326

A. F.
Laguna Niguel, CA
February 24, 2014
Signature # 325

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Y. K.
Seattle, WA
February 24, 2014
Signature # 324

M. T.
Pottstown, PA
February 24, 2014
Signature # 323

P. S.
Bishop, CA
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D. P.
Corona, CA
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E. G.
Evanston, IL
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Signature # 320

A. M.
Springfield, MO
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L. V.
Jamaica Plain, MA
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N. G.
Monticello, MN
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A. B.
Lancaster, CA
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R. W.
Indianapolis, IN
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Signature # 315

A. D.
Hewlett, NY
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K. R.
February 24, 2014
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M. B.
The Colony, TX
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C. E.
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V. G.
Milwaukee, WI
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S. W.
Marion, IL
February 24, 2014
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K. R.
Keedysville, MD
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C. L.
February 24, 2014
Signature # 307

K. M.
Sterling Heights, MI
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K. M.
Greenlawn, NY
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Signature # 305

C. H.
Brandon, FL
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T. F.
Temperance, MI
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J. N.
Hawthorne, CA
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A. F.
Twentynine Palms, CA
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K. T.
Reno, NV
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B. M.
Barstow, CA
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K. A.
Fullerton, CA
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G. C.
Skokie, IL
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G. S.
Cookeville, TN
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L. S.
Mahomet, IL
February 23, 2014
Signature # 295

T. R.
Colleyville, TX
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Signature # 294

C. T.
Pittsburgh, PA
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Signature # 293

C. F.
Boca Raton, FL
February 23, 2014
Signature # 292

A. C.
London, KY
February 23, 2014
Signature # 291

A. Z.
Pleasanton, CA
February 23, 2014
Signature # 290

G. E.
Mead, WA
February 23, 2014
Signature # 289

C. C.
Death Valley, CA
February 23, 2014
Signature # 288

E. M.
Maurice, LA
February 23, 2014
Signature # 287

M. A.
Pierz, MN
February 23, 2014
Signature # 286

S. B.
Las Vegas, NV
February 23, 2014
Signature # 285

H. W.
Seattle, WA
February 23, 2014
Signature # 284

J. J.
February 23, 2014
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J. B.
Soquel, CA
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L. P.
Oak Park, MI
February 23, 2014
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S. T.
Apex, NC
February 23, 2014
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Y. K.
Santa Barbara, CA
February 23, 2014
Signature # 279

S. E.
Jamesville, NY
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K. F.
Washington, DC
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J. G.
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A. D.
Seattle, WA
February 23, 2014
Signature # 275

A. F.
San Francisco, CA
February 23, 2014
Signature # 274

J. W.
February 23, 2014
Signature # 273

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K. M.
Elizabeth, CO
February 23, 2014
Signature # 272

I. P.
February 23, 2014
Signature # 271

E. C.
Virginia Beach, VA
February 23, 2014
Signature # 270

E. T.
Yakima, WA
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E. M.
San Mateo, CA
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L. H.
February 22, 2014
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A. G.
Miami, FL
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B. W.
Richmond, TX
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M. R.
Reno, NV
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J. P.
Northbridge, MA
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T. M.
Orinda, CA
February 22, 2014
Signature # 262

C. M.
Old Town, ME
February 22, 2014
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J. B.
Carmel Valley, CA
February 22, 2014
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B. S.
Gladstone, OR
February 22, 2014
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S. C.
Spring Valley, CA
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K. D.
Bishop, CA
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R. W.
Washburn, WI
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V. T.
Aliso Viejo, CA
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D. N.
February 22, 2014
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M. K.
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J. C.
Denton, TX
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Farmington, MI
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D. H.
Burns, TN
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M. B.
San Francisco, CA
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S. C.
February 22, 2014
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M. R.
Glencoe, IL
February 22, 2014
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M. F.
February 22, 2014
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S. T.
El Dorado Hills, CA
February 22, 2014
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S. D.
Rocklin, CA
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Signature # 240

T. R.
Santa Fe, NM
February 22, 2014
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E. W.
Batesville, VA
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M. G.
Franklin, MA
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K. D.
February 22, 2014
Signature # 236

J. C.
San Francisco, CA
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Signature # 235

M. L.
Riverside, CA
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J. F.
Port Saint Lucie, FL
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L. K.
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P. S.
Holtville, CA
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G. P.
Chicago, IL
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J. C.
Death Valley, CA
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J. S.
February 22, 2014
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M. C.
Carson, CA
February 22, 2014
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M. R.
Weyauwega, WI
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H. H.
Annapolis, MD
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P. M.
Seattle, WA
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J. S.
Encino, CA
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M. S.
Placentia, CA
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M. M.
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M. H.
Joshua Tree, CA
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M. P.
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R. G.
Sacramento, CA
February 22, 2014
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E. R.
Joshua Tree, CA
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Signature # 217

H. B.
Memphis, TN
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L. W.
Spokane, WA
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Signature # 215

J. V.
Ridgecrest, NC
February 22, 2014
Signature # 214

B. P.
Lapeer, MI
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B. T.
Boston, MA
February 22, 2014
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J. G.
Orlando, FL
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E. R.
February 22, 2014
Signature # 210

A. L.
Pittsburg, CA
February 22, 2014
Signature # 209

J. N.
Pioneertown, CA
February 22, 2014
Signature # 208

T. S.
Mckinleyville, CA
February 22, 2014
Signature # 207

J. T.
Antioch, CA
February 22, 2014
Signature # 206

K. M.
Felton, CA
February 22, 2014
Signature # 205

T. W.
Barrington, NJ
February 22, 2014
Signature # 204

T. A.
Amelia, OH
February 22, 2014
Signature # 203

V. C.
Palm Springs, CA
February 21, 2014
Signature # 202

M. C.
Austin, TX
February 21, 2014
Signature # 201

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J. E.
Littleton, CO
February 21, 2014
Signature # 200

M. B.
Knoxville, TN
February 21, 2014
Signature # 199

W. M.
Washingtonville, NY
February 21, 2014
Signature # 198

K. B.
Kent, WA
February 21, 2014
Signature # 197

L. C.
Philomath, OR
February 21, 2014
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S. T.
Apex, NC
February 21, 2014
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H. T.
February 21, 2014
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T. S.
Carmichael, CA
February 21, 2014
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A. S.
Vernon, AZ
February 21, 2014
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S. N.
Frederick, MD
February 21, 2014
Signature # 191

J. B.
Oklahoma City, OK
February 21, 2014
Signature # 190

L. B.
El Cajon, CA
February 21, 2014
Signature # 189

J. H.
Palm Desert, CA
February 21, 2014
Signature # 188

Q. L.
February 21, 2014
Signature # 187

P. S.
Issaquah, WA
February 21, 2014
Signature # 186

J. A.
North Fork, ID
February 21, 2014
Signature # 185

D. B.
Barnhart, MO
February 21, 2014
Signature # 184

W. L.
Portland, OR
February 21, 2014
Signature # 183

T. G.
Monument, CO
February 21, 2014
Signature # 182

J. M.
Dayton, TN
February 21, 2014
Signature # 181

S. M.
February 21, 2014
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E. M.
San Jose, CA
February 21, 2014
Signature # 179

S. D.
Willmar, MN
February 21, 2014
Signature # 178

E. C.
February 21, 2014
Signature # 177

B. H.
Mount Vernon, WA
February 21, 2014
Signature # 176

M. J.
Newport News, VA
February 21, 2014
Signature # 175

M. M.
Stevensville, MT
February 21, 2014
Signature # 174

L. T.
Sunnyvale, CA
February 21, 2014
Signature # 173

M. P.
Miami, FL
February 21, 2014
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K. M.
Bradenton, FL
February 21, 2014
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K. M.
Louisville, KY
February 21, 2014
Signature # 170

F. H.
February 21, 2014
Signature # 169

S. K.
February 21, 2014
Signature # 168

J. P.
Azusa, CA
February 21, 2014
Signature # 167

G. A.
Rosedale, NY
February 21, 2014
Signature # 166

H. E.
Venice, CA
February 21, 2014
Signature # 165

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J. M.
Fort Myers, FL
February 21, 2014
Signature # 164

M. K.
Willow Street, PA
February 21, 2014
Signature # 163

S. K.
February 21, 2014
Signature # 162

E. R.
Lexington, KY
February 21, 2014
Signature # 161

B. W.
Elgin, IL
February 21, 2014
Signature # 160

H. T.
Stoddard, NH
February 21, 2014
Signature # 159

G. A.
Carbondale, CO
February 21, 2014
Signature # 158

R. W.
Mattoon, IL
February 21, 2014
Signature # 157

T. S.
Colorado Springs, CO
February 21, 2014
Signature # 156

C. H.
Ocean View, HI
February 21, 2014
Signature # 155

B. B.
Ridgecrest, CA
February 21, 2014
Signature # 154

A. B.
San Diego, CA
February 21, 2014
Signature # 153

S. C.
Twentynine Palms, CA
February 21, 2014
Signature # 152

D. B.
Ridgecrest, CA
February 21, 2014
Signature # 151

S. B.
Pioneertown, CA
February 21, 2014
Signature # 150

J. H.
National City, CA
February 21, 2014
Signature # 149

M. R.
Apple Valley, CA
February 21, 2014
Signature # 148

S. G.
Apple Valley, CA
February 21, 2014
Signature # 147

A. G.
Fullerton, CA
February 21, 2014
Signature # 146

G. K.
Long Beach, CA
February 20, 2014
Signature # 145

A. B.
February 20, 2014
Signature # 144

E. P.
Auburn, CA
February 20, 2014
Signature # 143

J. W.
February 20, 2014
Signature # 142

J. M.
February 20, 2014
Signature # 141

M. C.
Reseda, CA
February 20, 2014
Signature # 140

G. H.
February 20, 2014
Signature # 139

L. A.
Ipswich, SD
February 20, 2014
Signature # 138

M. S.
February 20, 2014
Signature # 137

S. Y.
Matawan, NJ
February 20, 2014
Signature # 136

B. H.
Beverly Hills, CA
February 20, 2014
Signature # 135

A. W.
Independence, CA
February 20, 2014
Signature # 134

L. B.
San Francisco, CA
February 19, 2014
Signature # 133

A. R.
Seattle, WA
February 19, 2014
Signature # 132

T. F.
Santa Barbara, CA
February 19, 2014
Signature # 131

S. F.
El Cerrito, CA
February 19, 2014
Signature # 130

N. M.
Independence, CA
February 19, 2014
Signature # 129

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J. Z.
Tampa, FL
February 19, 2014
Signature # 128

D. C.
Desert Center, CA
February 19, 2014
Signature # 127

S. C.
Walnut Creek, CA
February 19, 2014
Signature # 126

R. S.
Riverside, CA
February 19, 2014
Signature # 125

J. B.
Frederick, MD
February 19, 2014
Signature # 124

C. P.
Phoenix, AZ
February 19, 2014
Signature # 123

R. T.
Morongo Valley, CA
February 19, 2014
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B. P.
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R. B.
Palm Springs, CA
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I. W.
February 19, 2014
Signature # 119

S. B.
February 19, 2014
Signature # 118

R. G.
Fargo, ND
February 19, 2014
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T. W.
San Diego, CA
February 19, 2014
Signature # 116

G. S.
Sacramento, CA
February 19, 2014
Signature # 115

I. A.
Los Angeles, CA
February 19, 2014
Signature # 114

M. A.
Claremont, CA
February 19, 2014
Signature # 113

C. H.
Bishop, CA
February 19, 2014
Signature # 112

J. F.
February 19, 2014
Signature # 111

R. S.
Oakland, CA
February 19, 2014
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J. A.
Baker, CA
February 19, 2014
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T. B.
Los Angeles, CA
February 19, 2014
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T. L.
Baker, CA
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M. R.
Chino, CA
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Signature # 106

R. K.
Barstow, CA
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J. M.
Las Vegas, NV
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R. C.
Salt Lake City, UT
February 19, 2014
Signature # 103

G. S.
February 19, 2014
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R. M.
Hinkley, CA
February 19, 2014
Signature # 101

A. N.
Tecopa, CA
February 19, 2014
Signature # 100

D. S.
Lafayette, CO
February 18, 2014
Signature # 99

E. L.
Wrightwood, CA
February 18, 2014
Signature # 98

J. P.
Long Beach, CA
February 18, 2014
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R. B.
Newberry Springs, CA
February 18, 2014
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W. B.
Bishop, CA
February 18, 2014
Signature # 95

P. V.
Kent, WA
February 18, 2014
Signature # 94

M. P.
Lone Pine, CA
February 18, 2014
Signature # 93

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S. P.
Bishop, CA
February 18, 2014
Signature # 92

J. J.
Santa Cruz, CA
February 18, 2014
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P. F.
Twentynine Palms, CA
February 18, 2014
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N. G.
Las Vegas, NV
February 18, 2014
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C. S.
Twentynine Palms, CA
February 18, 2014
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M. K.
Sterling Heights, MI
February 18, 2014
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V. C.
Altamonte Springs, FL
February 18, 2014
Signature # 86

J. C.
February 18, 2014
Signature # 85

T. D.
Portland, OR
February 18, 2014
Signature # 84

V. R.
Rochester, NY
February 18, 2014
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E. C.
Las Vegas, NV
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L. N.
Palo Alto, CA
February 18, 2014
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R. M.
Arcata, CA
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Las Vegas, NV
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D. J.
Bloomington, IN
February 18, 2014
Signature # 78

J. F.
Provo, UT
February 18, 2014
Signature # 77

D. L.
Barstow, CA
February 18, 2014
Signature # 76

L. T.
Joshua Tree, CA
February 18, 2014
Signature # 75

M. R.
Independence, CA
February 18, 2014
Signature # 74

G. F.
Flagstaff, AZ
February 18, 2014
Signature # 73

L. H.
East Lansing, MI
February 18, 2014
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J. P.
Shoshone, CA
February 18, 2014
Signature # 71

M. I.
La Palma, CA
February 18, 2014
Signature # 70

C. D.
Joshua Tree, CA
February 18, 2014
Signature # 69

J. G.
February 18, 2014
Signature # 68

P. H.
New York, NY
February 18, 2014
Signature # 67

T. H.
Mancos, CO
February 18, 2014
Signature # 66

L. K.
Vista, CA
February 18, 2014
Signature # 65

W. B.
Clearlake, CA
February 18, 2014
Signature # 64

E. F.
Redwood City, CA
February 18, 2014
Signature # 63

D. W.
La Mesa, CA
February 18, 2014
Signature # 62

Y. M.
Corvallis, OR
February 18, 2014
Signature # 61

M. D.
Mount Hermon, CA
February 18, 2014
Signature # 60

C. D.
Joshua Tree, CA
February 18, 2014
Signature # 59

S. A.
Emeryville, CA
February 18, 2014
Signature # 58

B. S.
Emeryville, CA
February 18, 2014
Signature # 57

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E. P.
Santa Barbara, CA
February 17, 2014
Signature # 56

R. S.
Chicago, IL
February 17, 2014
Signature # 55

K. S.
Los Angeles, CA
February 17, 2014
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K. B.
San Diego, CA
February 17, 2014
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I. H.
Vista, CA
February 17, 2014
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L. H.
February 17, 2014
Signature # 51

W. S.
Ann Arbor, MI
February 17, 2014
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T. E.
Ojai, CA
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Signature # 49

M. V.
Rancho Cucamonga, CA
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J. G.
Joshua Tree, CA
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D. S.
Laguna Beach, CA
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A. J.
Fresno, CA
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M. K.
Fresno, CA
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T. R.
San Pedro, CA
February 17, 2014
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G. P.
Altadena, CA
February 17, 2014
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L. C.
Beatty, NV
February 17, 2014
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K. T.
Joshua Tree, CA
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Signature # 40

K. E.
Beatty, NV
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J. K.
Altadena, CA
February 17, 2014
Signature # 38

T. O.
Joshua Tree, CA
February 17, 2014
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Y. H.
Los Angeles, CA
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J. B.
Henderson, NV
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Signature # 35

A. L.
Sausalito, CA
February 17, 2014
Signature # 34

T. M.
Cloverdale, CA
February 17, 2014
Signature # 33

R. F.
Syracuse, NY
February 17, 2014
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K. D.
Springfield, OR
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J. F.
Los Angeles, CA
February 17, 2014
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D. K.
Durham, NC
February 17, 2014
Signature # 29

H. H.
Coleville, CA
February 17, 2014
Signature # 28

L. R.
Marlow, NH
February 17, 2014
Signature # 27

S. G.
Washington, DC
February 17, 2014
Signature # 26

K. S.
Fayetteville, NC
February 17, 2014
Signature # 25

B. B.
February 17, 2014
Signature # 24

R. M.
Redwood City, CA
February 17, 2014
Signature # 23

M. H.
Binghamton, NY
February 17, 2014
Signature # 22

P. B.
Glendora, CA
February 17, 2014
Signature # 21

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E. M.
Pasadena, CA
February 17, 2014
Signature # 20

S. D.
Rancho Mirage, CA
February 17, 2014
Signature # 19

S. K.
February 17, 2014
Signature # 18

E. M.
Nevada City, CA
February 17, 2014
Signature # 17

L. A.
Monterey Park, CA
February 17, 2014
Signature # 16

B. S.
February 17, 2014
Signature # 15

D. F.
Joshua Tree, CA
February 17, 2014
Signature # 14

J. R.
San Diego, CA
February 17, 2014
Signature # 13

P. E.
Ocotillo, CA
February 17, 2014
Signature # 12

E. H.
Los Angeles, CA
February 16, 2014
Signature # 11

L. N.
Sonoma, CA
February 16, 2014
Signature # 10

J. S.
Boulder Creek, CA
February 16, 2014
Signature # 9

D. S.
Sacramento, CA
February 16, 2014
Signature # 8

E. B.
February 16, 2014
Signature # 7

D. C.
February 16, 2014
Signature # 6

H. R.
February 16, 2014
Signature # 5

C. C.
Joshua Tree, CA
February 16, 2014
Signature # 4

E. P.
February 13, 2014
Signature # 3

R. S.
Upland, CA
February 13, 2014
Signature # 2

51-7 cont.

Comment Letter 52

Alexandra Kostalas

From: Childers, Jeffery <jchilders@blm.gov>
Sent: Monday, March 03, 2014 8:51 AM
To: Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: soda mtn solar project coment

Jeffery K. Childers
Project Manager
RECO California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553
Cell: 951-807-6737

---------- Forwarded message ----------
From: **Terry Young** <rasorroadservice@yahoo.com>
Date: Sat, Mar 1, 2014 at 9:58 AM
Subject: soda mtn solar project coment
To: "jchilders@blm.gov" <jchilders@blm.gov>, "ksymons@blm.gov" <ksymons@blm.gov>, "sodamtnsolar@blm.gov" <sodamtnsolar@blm.gov>

To Whom It may Concern
My name is Terry Young and I have owned and operated the Rasor Road Service station in the Soda Mountains area for over 30 years. The station itself has been in operation for over 80 years,My family and I also own property in the OHV area known as Rasor Ranch. During that time I have witnessed many changes to the community and the area.

Over the years I have owned this business, I have seen how the small town of Baker has changed, and not for the better. As you know, Baker is entirely dependent on servicing the 60-70,000 cars and trucks that drive through the area daily on the 15 freeway (this is also the base for my business) that stop for gas or food on their way to or from Las Vegas. This business is dependent on the state of the economy, if people have money to spend on a weekend away, and produces low-wage unskilled jobs like food service jobs, that do not encourage sustainable growth in the local economy. 52-1

It's not healthy for a town to be so dependent on low-wage, unskilled work. I'd like to see some economic activity in the area that would support skilled labor.

The introduction of the Mojave Preserve in the 90s was a positive thing for the wildlife in the area. The downside is that the ranching and living from the land that occurred there has now ended, bringing with it the end of a way of life in the desert. There has to be some relationship between the people who live here and the land to support our small economy.

Soda Mountain Solar, which is proposed for the area adjacent to my property and business, would bring in large numbers of construction workers to the area for the 2-3 year period required to build the project. Hopefully, some of these workers would be hired or trained through apprenticeships from the local area. Importantly, though, the majority of the ongoing operations and maintenance jobs could be held by local residents. Even though it's a relatively modest number of jobs--I've heard a couple of dozen--even a small number of well-paying jobs in this community, especially jobs with long-term commitments like a solar plant, could help lift our local economy and improve the quality of life in the town.

It seems like there is a certain amount of conflict between various groups who love the desert for different reasons. I see people who love the Preserve come through, as well as the OHV community witch I am a member of , and the laborers from Ivanpah who are driving downhill after work. I think these different uses can live side by side, and can coexist without ruining the experience of the desert for each other. The solar plant will only be visible from a remote corner of the Preserve, which overlooks the 15 and the transmission towers as well. The people who use the OHV area will still be able to access it and enjoy their recreation there. I will continue to offer the services here at Rasor Road that have been available for over 80 years.

52-1 cont.

I think the people who would prevent this project from being built here are looking at the land through rose colored glasses and choosing not to see the freeway, the transmission towers, the mines, etc. They just don't want to see anything built in the desert, period. But that's not going to help our community and the people who live here, who need green energy projects like Soda Mountain to maintain their communities and economy.

Thank you.

Terry Young
President Beacon Station Inc DBA :Rasor Road Service
760-733-4347
rasorroadservice@yahoo.com

Comment Letter 53

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:11 AM
To: Soda Mountain Project EIS-EIR; Alexandra Kostalas; Michael Manka
Subject: Fwd: Relocate the Soda Mountain Solar Project and Protect the Mojave National Preserve

---------- Forwarded message ----------
From: **Chris Lish** <lishchris@yahoo.com>
Date: Sun, Mar 2, 2014 at 6:01 PM
Subject: Relocate the Soda Mountain Solar Project and Protect the Mojave National Preserve
To: "sodamtnsolar@blm.gov" <sodamtnsolar@blm.gov>

Sunday, March 2, 2014

Attn: Jeffery Childers
Soda Mountain Solar Project Manager
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

Subject: Relocate the Soda Mountain Solar Project and Protect the Mojave National Preserve

Dear Soda Mountain Solar Project Manager Jeffery Childers,

Bechtel proposes to build the Soda Mountain Solar Project on 4,179 acres of public land adjacent to Mojave National Preserve, threatening the resources and landscape of this treasured unit of the National Park System. The Soda Mountain Solar Project would be located one quarter of a mile away from Mojave National Preserve and be one of the closest—if not the closest—industrial scale renewable energy projects to a national park unit in the entire southwestern United States. 53-1

> *"Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose and method."*
> *-- Theodore Roosevelt*

The environmental impacts of the Soda Mountain Solar Project include decreased spring discharge at Zzyzx, loss of high-quality desert tortoise habitat, increased habitat fragmentation for desert bighorn sheep, and loss of wildlife connectivity with nearby wilderness areas. The project also threatens water quality and quantity at Mohave Chub Spring in the Mojave National Preserve, the home of the federally endangered tui chub--one of our rarest desert fish. And the project will obstruct dramatic views into the Preserve and degrade the dark skies experience of the park's 550,000 annual visitors. 53-2

> *"Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish—indeed, all the living creatures of prairie and woodland and seashore—from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement."*
> *-- Theodore Roosevelt*

I urge you to work to relocate the Soda Mountain Solar Project to an area where it does not harm our national park units, natural resources, archaeological sites, or desert communities. At last count, the California desert alone has over one million acres of disturbed lands or previously developed lands that may be more appropriate for solar panels and associated development. 53-3
Additionally, I respectfully request a 60 day extension on the public comment period to further analyze alternative locations for this project. 53-4

"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."
-- Aldo Leopold

Thank you for your consideration of my comments. Please do NOT add my name to your mailing list. I will learn about future developments on this issue from other sources.

Sincerely,
Christopher Lish
Olema, CA

Comment Letter 54

Ironworkers Local 433

International Association of Bridge, Structural & Ornamental Iron Workers A.F.L.-C.I.O.

252 W. HILLCREST AVENUE SAN BERNARDINO, CALIFORNIA 92408

PHONE: (909) 884-5500
FAX: (909) 885-0047
gabevillarreal433@yahoo.com

GABRIEL "GABE" VILLAREAL
Business Agent

March 3, 2014

My name is Gabriel Villarreal, and I attended the public meeting held in January regarding the Soda Mountain Solar project to represent the Ironworkers Local 433.

As a Union Member and a resident of the desert, I have personal knowledge of the site and also of the effects of solar development on the community and on the Union.

For us here in the desert, we have to find some kind of balance between our economy and conservation. I have heard people criticize it, but for us in the trades, Ivanpah, The Genesis and The Abengoa were a life saver. People were losing their homes, and times were really tough with 50% unemployment in construction which equaled over 4000 workers just in the Inland Empire. Our members are still recovering from a long slump, and need projects like Soda Mountain and many others to move forward.

54-1

Having said that, I understand how much people love the wilderness at the Soda Mountain site because I visited that area for over ten years. I camp at the backside of the Rasor Road OHV area which is approximately 6 miles east away from the 15 freeway and the project.

I understand that people love to visit the OHV area, because I am one of those people, and I don't think that building a solar plant close to the freeway will affect my experience of visiting Rasor Road. I think this project is located in a way that keeps it close to the freeway and away from areas that people want to enjoy.

I support the project and respectfully ask that the project be approved.

Sincerely,

Gabriel Villarreal
Business Agent

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:09 AM
To: Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Soda Mountain Solar Att: Jeffery Childers

---------- Forwarded message ----------
From: <ALPrice2@aol.com>
Date: Sun, Mar 2, 2014 at 10:29 PM
Subject: Soda Mountain Solar Att: Jeffery Childers
To: sodamtnsolar@blm.gov
Cc: slall@marathon-com.com

March 2,2014

My name is Ann Price. I am a life long resident of Baker, California. I am also a business owner in the community. Many years ago, my great, great grandfather, "Dad" Fairbanks, was the first business owner and founder of Baker. He started selling gas out of 55 gallon drums to travelers on what is now Baker Blvd. Members of my family have been here ever since.

You might say I have a vested interest in this desert and the East Mojave and the community of Baker. In the 60 years I have lived here I have seen many changes to Baker but our economy has always been dependent on the traffic moving along the highway to Las Vegas. That traffic is based on a healthy national economy. Many of our businesses have closed in the last few years and many people have relocated looking for jobs.

The Soda Mountain Solar Project will bring prosperity to Baker. The project will bring construction jobs as well as long term, well paying jobs to the community. It will bring families into Baker and this will benefit our schools and businesses. Our community can certainly benefit from the economic boost this project would provide.

I am a great advocate of solar power and I think the travelers along Interstate 15 would be amazed to find themselves traveling through a solar field near Baker. I believe the solar projects along the Interstate 15 corridor from Barstow into Nevada can only enhance a trip through the East Mojave.

55-1

Ann Price
Baker, California

Comment Letter 56

Alexandra Kostalas

From: Childers, Jeffery <jchilders@blm.gov>
Sent: Monday, March 03, 2014 8:53 AM
To: Janna Scott; Alexandra Kostalas; Michael Manka; Soda Mountain Project EIS-EIR
Subject: Fwd: Comment on the proposed Soda Mountain Solar Project

Jeffery K. Childers
Project Manager
RECO California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553
Cell: 951-807-6737

---------- Forwarded message ----------
From: **Richard Haney** <rfhaney@gmail.com>
Date: Sun, Mar 2, 2014 at 9:59 PM
Subject: Comment on the proposed Soda Mountain Solar Project
To: Jeffrey Childers <jchilders@blm.gov>

Dear Mr. Childers,

I am writing to provide comment in response to the BLM's Notice of Availability for the Soda Mountain Solar Project's Draft California Desert Conservation Area Plan Amendment and a Draft EIS/EIR. 56-1

I am opposed to the Soda Mountain Solar Project's currently proposed location for several reasons. And there is also a need to give serious consideration for distributed solar generation as an alternative. 56-2

First of all, the project is located not only too close to the Mojave National Preserve, but also too close to I-15. The deep spiritual values of the natural landscape -- as derived from the view -- will be destroyed not only for visitors to the Mojave National Preserve and but also especially for people driving along I-15. Visiting Las Vegas from the more western areas of southern California will become a progressively uglier and uglier experience because of the destruction of the natural landscape. 56-3

At the very least, the comment period should be extended 60 days and the BLM should hold public meetings in Las Vegas, NV, since the project will especially impact Las Vegas via impacts on visitors to Las Vegas and also impact residents of Las Vegas who consider the Mojave National Preserve a prize jewel for the area. 56-4

And at the very least, the project proposal should include alternative locations in solar zone(s) under the Solar Programmatic Environmental Impact Statement developed by the Department of the Interior. 56-5

Moreover, the need for jobs can be satisfied at least as well by alternatives not included in the Draft Amendment and Draft EIS/EIR, and for some alternatives, the need may be satisfied far better. 56-6

Yours truly,

Richard Haney
61843 Terrace Drive
Joshua Tree, CA 92252

Comment Letter 57

Alexandra Kostalas

From: jchilders@blm.gov on behalf of Soda_Mtn_Solar, BLM_CA <blm_ca_soda_mtn_solar@blm.gov>
Sent: Monday, March 03, 2014 9:10 AM
To: Soda Mountain Project EIS-EIR; Alexandra Kostalas; Michael Manka
Subject: Fwd: This member of the public's concerns regarding the proposed Soda Mtns. Solar project.

---------- Forwarded message ----------
From: **Doug Peeler** <dlpeeler@earthlink.net>
Date: Sun, Mar 2, 2014 at 6:36 PM
Subject: This member of the public's concerns regarding the proposed Soda Mtns. Solar project.
To: sodamtnsolar@blm.gov

My concerns regarding this project are the same as my concerns for all setting aside of BLM land, for whatever reason, that it may limit public access for recreational purposes, especially rock collecting.

I started collecting minerals when I was 7 years old, as part of family vacation and camping trips. This hobby proved to be good clean fun the whole family could get into and enjoy. I don't know what my parents, 4 siblings, and I would have done if we were met with road closures and huge fenced off areas everywhere we turned to look for rocks or go to a published collecting site. We might have been so discouraged that I soured on rock collecting and never chose to study geology as a career path. At a time when it is observed that young people need to have more good clean pursuits, get exercise, and not just sit behind computers and smart phones day in and day out, limiting opportunities for getting out into nature on public lands is not helping things at all.

Please realize also that the largest number of existing rock/mineral collectors are the parents and other middle aged people, whose children are grown or are now retired, and are looking to stay active and enjoy the camaraderie of other collecting, camping, and outdoors enthusiasts. This group of people is far larger than you may know based on the correspondence you receive from active memberships of mineral and gem clubs of this country; a group I know has been under represented at your poorly advertised "public outreach" meetings. Most of the public just has no idea of what is being done or that their access could be greatly limited.

Please assure that the land set aside for this project, and for other public land management projects, provides reasonable access for young future geologists-to-be as well as current collecting enthusiasts. My suggestion is that you look hard at providing for personal and group collecting permits, as is already done for hunting or fishing, that can be easily applied for and affordable, that will allow access to BLM lands and access roads for the designated purposes. Other countries already have similar permitting vehicles for their citizenry, this country can certainly improve on their lead.

57-1

Thank You for your time and consideration of the concerns I have given here.

Respectfully,

Doug Peeler, CA-registered Professional Geologist/Consultant

San Diego, CA 92117

dlpeeler@earthlink.net

619-244-0757 Mobile

2 March 2014

Bradford W. Berger
PO Box 142
Pioneertown, CA 92268
760-228-0738

Mr. Jeffery Childers
Soda Mountain Solar Project Manager
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

Dear Mr. Childers:

Please consider this letter as my comments and suggestions regarding the Draft Environmental Impact Statement (DEIS) for the Soda Mountain Solar Project.

There are several issues I feel are of major concern:

1) The applicant states that the project will be built on land that is sparsely vegetated. This appears to be an attempt to justify the suitability of the land for the project. My concern is that however sparsely vegetated the site may be, most of it is naturally vegetated and pristine – certainly in good enough condition to warrant mention of unavoidable impact to bighorn, desert kit fox and American badger. If the project moves forward, the loss in habitat should be mitigated with at least an equal acreage set aside that is protected from development. 58-1

2) The applicant claims to need 33 acre-feet of water per year to maintain the site. This water, equivalent to nearly 11 million gallons per year is excessive. Considering this project and other potential projects such as Cadiz, and the Silurian Valley solar array there is a real possibility of a major drop in the water level of area aquifers. No well permit should be granted. 58-2

3) The land adjacent to the freeway is a very good location for the solar panels, but should not be allowed to extend more than 1/2 mile from either side of the freeway. This would keep the solar array within the damage footprint of the roadway. The fact that the project would be adjacent to the Mojave National Preserve really points toward minimizing the affected landscape. 58-3

4) Although it is far-sighted to put forward a plan to decommission the site when the project's 30-40 year life span is over, it is unknown who will actually control the site after that time. An escrow fund should be created with constant deposits being necessary to maintain a permit to use the site. The full amount required to restore the site should be in place after no more than 5 to 10 years. 58-4

I appreciate your concern in this matter and look forward to reviewing the Final EIS. Please keep me informed about this project using the address listed above.

Sincerely,
Bradford W. Berger

Soda Mountain Solar Project Draft PA/EIS/EIR Comments

March 2nd, 2014

Mr. Jeff Childers
Project Manager
BLM California Desert District
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

Sent by email: sodamtnsolar@blm.gov

Dear Mr. Childers,

I am writing as a concerned citizen scientist to provide public comments in regards to the Draft Environmental Impact Statement (EIS) for the Soda Mountain Solar Project, which proposes the development of a 358-megawatt solar energy plant by Soda Mountain Solar, LLC, in San Bernadino County, California. I appreciate the BLM's efforts to analyze seven alternatives, outlined in the EIS to explore the environmental impacts and potential consequences of constructing a solar energy generating facility on public lands, to capture sustainable energy resources in the Mojave Desert region.

The issues I am concerned about in the EIS relate to the impacts that a solar energy facility will have on the desert habitat and ecosystem function, the effects that the change in land use will have on local wildlife populations and water resources, the ecological processes of wildland fires in the desert and new hazards that a plant could pose, as well as the change in visual resources of the landscape that may affect the public's enjoyment of the desert. Solar energy collected via panel system arrays seems to require a substantial amount of change in land use and could present new disturbances to human and animal communities. A large amount of land space is required and water resources become valuable in the high demand to clean panels for efficiency. Connectivity for plants and animals that use the area could become stunted. There may be a change in their habitat and food resources and in some cases the appearance of new resources, attracting them to the area where threats to their safety could occur. The reflectivity and lighting produced by the panel arrays will change the way in which the environment is viewed by people and animals. Risks of accidental fire may become elevated in the area with energy facilities, transformers, etc. Choosing to build a solar plant in the desert seems efficient from the perspective of maximizing energy capture from sunlight, however not efficient in its use of water, which is a very limited resource in sensitive desert environments. Large scale changes in this sensitive desert environment from construction and solar panel application would without a doubt have direct impacts and significant negative effects to natural ecological processes and animal behavior.

59-1

Significant effects were listed in Table ES-2 in the EIS for impacts to Vegetation, Wildlife, Visual Resources, Water Resources, and Wildland Fire Ecology. I found that the EIS did list intelligent suggestions for mitigation measures in these areas I was concerned with about wildlife and also addressed my concerns to issues with water use and fire safety from the applicant proposed measure (APM's). Measures to protect wildlife from the proposed brine pools and limit the amount light disturbance satisfied my concerns that potential changes to the environment which attracted wildlife were considered in the APM's as well. In the case of wildlife, I felt that the EIS addressed the impacts to desert tortoise, burrowing owls, and big horn sheep with good background research collected from well-developed protocols from agencies to collect baseline information. However, I felt that the EIS did not address bat species with this same manner and may be inadequate in assessment of potential impacts and disagree with statement that the level of risk to special-status bats is low, but agree that the level of potential risk to bats would remain during the life of the solar project. According the Biological Technical Resources Report provided Appendix E-1, section 2.2.8 Bats: only one acoustic survey was conducted in the fall of 2012, for 3-4 nights at six locations. The acoustic monitoring should be able to identify bat species that use the area and provide information on seasonal use. **I do not feel that one acoustic survey conducted once could establish adequate information for the EIS on the three species of BLM "(S) sensitive" concern for bats and their use of the actual project area**. The Biological Technical Resources Report Results (Table 3.3-1) lists high potential of presence in the project area for the Pallid bat and Townsend's big-eared bat, both species were found roosting in nearby mines during the roost survey, but not detected at the time of the acoustic survey, due to the time of year

59-2

being during their hibernation period. However, details in the habitat column of that table mention that these species would probably forage in the project site area, and could certainly fly to forage in the project area based on the data available about their flight movements. I would like to recommend that more research and monitoring be conducted in the area of biological resources as it pertains to local bat species. If these species are difficult to detect acoustically, as the Results section of the Biological Resources Technical Report suggests (pages E. 1-77, 1-78), then other suitable methods should be used to gather information about bat use of the project site, such as mist netting or radio tracking of bats found in nearby mines. I am grateful to the BLM for their consideration of the impacts that potential changes in foraging and behavior for bats in the project site and the collision aspects which they addressed in the EIS. We know that food resources could be affected for bats in the project area, with possible attraction to the site by a potential increase in insect prey brought in by lights and landscape changes such as brine ponds. And we know that there is potential for bats to be attracted to the reflection of light on the solar panel arrays and mistake it for water, and thus create collision hazards. For example, in table 3.4-2 Special Status Wildlife Known to Occur with Potential to Occur in the Study Area, both the pallid bat and the western mastiff bat are listed as a species found dead or injured as reported in ongoing monitoring data from solar projects under construction in the Sonoran and Mojave Deserts, yet I did not see any detailed information on fatality studies expanded upon with respect to those bat species or any other bat species specifically mentioned in the EIS. I did not see the western mastiff bat mentioned in the Biological Resources Technical Report either. The EIS seemed to only state general trends found in birds and bat fatality evidence. I do agree with the EIS "that direct and indirect construction-related impacts to special-status bats would be avoided and minimized by implementation of Mitigation Measures" (pg. 3.4-38) and recognize the importance of having the applicant adopt and implement a Bird and Bat Conservation Strategy (pg. 3.4-42). However, I believe that better baseline studies and use of post-construction monitoring results would be more informative in assessing potential impacts before they occur. An evaluation that states "Because no additional feasible mitigation has been identified, potential risks to special-status bat species would remain during Project operation and maintenance" and "under the cumulative scenario, construction monitoring results…strongly indicate that ongoing, unmitigated risks will remain at most solar facilities" and "the cumulative impact to special status bats would remain" is disheartening to long term conservation of bats, and should be remedied with better research into the cumulative and possibly additive effects of solar energy facilities.

59-2 cont.

After reviewing the statement, data sources in the appendices, and seven alternatives, I would recommend that the BLM choose an alternative that limits the amount of direct habitat destruction and loss of vegetation, lessens the impacts to wildlife connectivity and collision, and requires the least amount of local water resources. I think this could be accomplished with an alternative that had a smaller number of arrays and a reduced effect to species, such as alternatives B or C.

59-3

I understand the inherent difficulty of balancing land use for the public interest and need; our country must find the best methods possible to harvest renewable energy sources in a sustainable manner, while minimizing damage to sensitive habitats and ecosystem functions, and considering the adverse impacts our decisions will make to wildlife species and limited resources like water. My main concerns as a citizen scientist, are that environmental impacts to wildlife populations (especially those that are in decline), mainly with respect to birds and bats, caused by these technologies of harvesting "green" energy (such as solar and wind) are still not well understood. We need more research and monitoring to truly evaluate what kind of disturbances these structures create to wildlife behavior. We depend on our state and national agencies to assist in regulating our natural resources while protecting our varied interests in the environment, and I can see that effort clearly presented and analyzed by the BLM in this EIS, in the reflection of a variety of alternatives that scale the impacts presented by offering different solar panel array installation plans. I hope that my comments will assist the BLM choosing the most appropriate alternative for the Soda Mountain Solar Project.

59-4

Thank you for your consideration of my comments,

Corinna A. Pinzari

March 3, 2014

Mr. Jeffrey Childers
BLM Project Manager, Soda Mountain Solar Project
U.S. Bureau of Land Management
22835 Calle San Juan de Los Lagos
Moreno Valley, CA92553

Ms. Tracy Creason
Senior Planner, Land Use Services Department
County of San Bernardino
385 North Arrowhead Avenue, First Floor
San Bernardino, CA 92415-0187

Subject: **Comments on Soda Mountain Solar Project Draft Plan Amendment/ Environmental Impact Statement/Environmental Impact Report**

Dear Mr. Childers and Ms. Creason,

Soda Mountain Solar, LLC (SMS) has reviewed the Draft Plan Amendment/Environmental Impact Statement/Environmental Impact Report (PA/EIS/EIR) for the Soda Mountain Solar Project (Project). Our comments on the Draft PA/EIS/EIR are enclosed in Appendix A. SMS thanks the BLM and the County for your joint effort in preparing the PA/EIS/EIR. It is clear that great effort went into preparation of the document.

The applicant has worked closely with BLM on this Project since 2008, when the initial Project application was filed by Caithness Soda Mountain. As a direct result of the applicant's work with you, SMS has since reduced the Project footprint by 36 percent and the Project right-of-way by 56 percent, resulting in reduced impacts to:

- Cultural resources
- Utilities
- Sensitive plants
- Wildlife
- Wildlife connectivity
- Water resources
- Aesthetics and visual resources

60-1

The studies that we have conducted of the Project area and potential off-site locations support our assessment that the Project site is highly suitable for solar development and that an off-site alternative is neither feasible nor more environmentally favorable. Aspects of the Project area that make it suitable for solar development include:

- No impacts to potentially significant cultural resources
- Special-status plants can be avoided
- Few desert tortoise are located in the valley (estimate is 2 for the Project area)
- Adjacent to transmission infrastructure eliminating the associated impacts of a gen-tie line -
- Located within a BLM-designated utility corridor pursuant to Congressional -mandate
- Direct access to I-15
- Surrounded by the Soda Mountains, which reduce visibility of the Project from the -Mojave National Preserve, the Rasor Off-highway Vehicle area, and Highway I-15 -

60-2

The applicant has also worked hard to identify and adopt best practice design features to mitigate many of the Project's potential environmental effects in advance of NEPA and CEQA review, sometimes beyond what either statute requires under existing baseline conditions. Without requesting changes to the mitigation measures of the PA/EIS/EIR on this score alone, we respectfully refer you to Appendix B of this letter, which consists of a table demonstrating the extraordinary extent to which SMS anticipated and self-imposed the mitigation measures of the draft PA/EIS/EIR.

60-3

Solar energy currently makes up 1 percent of the United States energy market. Large utility scale projects and roof-top solar are both needed to achieve the State of California's renewable portfolio standards and the 20,000 MW public lands goal of President Obama's Climate Action Plan. The Project will also provide significant jobs and revenues to San Bernardino County.

60-4

Thank you for considering our comments on the PA/EIS/EIR. SMS is committed to working with the BLM, County, and other state and federal regulatory agencies to develop a Project consistent with all applicable legal and regulatory requirements.

Respectfully,

/s/

Adriane Wodey
SMS Project Manager

Enclosures: - SMS Comments on the Draft PA/EIS/EIR
Correspondence of Soda Mountain Solar APMs to Draft PA/EIS/EIR Mitigation Measures

Table A 1: Comments on Soda Mountain Solar PA/EIS/EIR		
Page (paragraph)	**Comment**	
Executive Summary		
ES-7	2nd Row, 5th Col.: Please replace dual decimals with single decimal.	60-5
Environmental Analysis		
1-10	8th Row, 2nd Col.: This table indicates that a NPDES construction permit will be obtained "if required". Please see our comment on page 3.19-20 (3), below. There are no federal waters on the project site.	60-6
2-37	The last paragraph is a duplicate. Please delete.	60-7
2-42	Section 2.83: Please clarify that BLM has no authority over demand-side management.	60-8
Introduction		
3.1-9	Last Row, 4th Col: Needs to be updated.	60-9
3.1-10	Second to Last Row, Last Col.: Please clarify mining claim date ranges.	60-10
Air Quality		
3.2-3 (3)	Add to beginning of section titled "Ozone (O3)": "As noted above, the Project area currently is designated as a non-attainment area for the state 1-hour and 8-hour ozone standards, the state PM10 24-hour standard, and the federal PM10 24-hour standard. The southern portion of the Project site that is within the Western Mojave Desert Ozone Non-attainment Area, which is classified as a non-attainment area for the federal 8-hour ozone standard and the state PM2.5 annual standard. See Figure 3.2-1 for an illustration of the portion of the Project site that is within the Western Mojave Desert Ozone Non-attainment Area."	60-11
3.2-5 (1)	Para 1, Line 9: Revise sentence by adding the underlined language as follows: "The MDAB is classified as non-attainment for the state standard within the Western Mojave Desert Ozone Non-attainment Area (see Figure 3.2-1), <u>moderate nonattainment for the federal PM 10 standards,</u> and classified as attainment or unclassified for the federal PM2.5 standards."	60-12
3.2-16 (2), (3)	Para 2, Line 5: The references to "de minimis level" throughout this section all appear to be referring to the General Conformity de minimis thresholds. However, this is not always clear in the text. If this is correct, the text should be clarified to note that this "de minimis" concept is connected with the General Conformity analysis. Para 2, Line 9: Consider adding a clarification that despite potentially exceeding the federal General Conformity de minimis levels, the project would not exceed these levels in the specific project areas that are included in the calculations for comparison against these thresholds (as explained in the General Conformity section of this analysis).	60-13
3.2-18 (1)	Mitigation Measure 3.2-1 should be revised to require watering <u>up</u> to twice daily during operation and maintenance. Mitigation Measure 3.2-1 is not "roughly proportional" to the	60-14

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	impact of the Project nor does it mitigate a significant or adverse impact. The measure calls for stringent watering of roads twice per day during operation and maintenance of the Project. There are situations where watering roads twice per day would create more activity on Project roads than the proposed operation and maintenance activities (e.g., one vehicle is driven out to and back from a solar array). Rather than requiring stringent watering on a twice daily basis, the mitigation should be revised to require periodic watering to minimize visible dust emissions consistent with the MDAQMD standards in Rule 403.2.	60-14 cont.
3.2-31	Para. 4, 5th Line: There is no mitigation measure titled "AIR-1." Revise to state "the applicant proposed measures and mitigation measures 3.2-1 and 3.2-2" instead.	60-15
3.2-32 (Mitigation Measure 3.2-2)	Limiting idling of vehicles to 5 minutes could cause health risks to workers, particularly during hot summer months. The working conditions may require idling of vehicles to provide air conditioning. This measure would create an unsafe work environment when daytime temperatures are in excess of 100 degrees. The Project area is very hot (daytime temperatures exceed 120 degrees in the summer) and arid. Air conditioning in the summer may be necessary to prevent a medical emergency from occurring and should not be limited to managing the emergency after it has already occurred. Please revise the measure to include an exception for engine idling required to provide air conditioning when temperatures exceed 85 degrees Fahrenheit if necessary to avoid health risks to workers.	60-16
Biological Resources - Vegetation		
3.3-2 (Table 3.3-1, row 6, column 2)	Table 3.3-1: the survey dates for the Jurisdictional Waters Delineation are incorrect. The survey dates were May 2009 and Winter 2012.	60-17
3.3-2 (3)	The second sentence of the third paragraph under 3.3.2 Regional and Local Environmental Setting should be revised to say: The Soda Mountain Wilderness Study Area is located in the Soda Mountains approximately 0.2 miles west <u>and north</u> of the Project site boundary.	60-18
3.3-3 (4)	Paragraph 4 states that a large wash that runs southwest to northeast through the area proposed for construction of the South and East arrays is mapped in the BRTR. The area that is mapped as *Ambrosia salsola* is within a wash near the East arrays. The vegetation community is mostly avoided by the current development plan. The sentence should be revised to reflect the presence of *Ambrosia salsola* in the East Array area only.	60-19
3.3-4 (Table 3.3-2, row 9, column 3)	The Proposed Action subtotal in Table 3.3-2 under the table heading Areas within Permanent Project Footprint appears to be incorrect. The acreage should match the area of permanent disturbance estimated for the project in Chapter 2: 2,222 acres.	60-20
3.3-4 (Table 3.3-2, row 17, column 3)	The Proposed Action subtotal in Table 3.3-2 under the table heading Areas within Temporary Project Footprint appears to be incorrect. The acreage should match the total area of disturbance for the project. The total area of disturbance is 2,557 acres in Chapter 2.	60-21
3.3-5 (3)	The sentence states that other species of concern are also present, but not widespread within and adjacent to the Project site. This statement is misleading. All of the weed species that were present with the exception of London Rocket are listed on Table 3.3-3. This	60-22

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	sentence should be deleted or revised because it creates the impression that the species that are presented in the document are widespread within and adjacent to the Project site and that there are other species that are not being disclosed. Please refer to the weed management plan for additional information on weeds that occur or may occur in the area and the current distribution of these species.	60-22 cont.
3.3-23 (2)	The acreage of the Mojave creosote bush scrub identified under the Native Vegetation Communities on page 3.3-23 is inconsistent with the estimations of surface disturbance given in Chapter 2, which we consider to be correct.	60-23
3.3-26 (8)	The document states that non-listed cactus presence was documented but the distribution was not mapped. This is incorrect. Please refer to the BRTR and the URS 2009 rare plant survey for the mapped distribution of cacti within portions of the Project site. The first sentence of the third paragraph under 3.3.6.2 Alternative B should be revised to state that the cactus distribution was mapped over the majority of the Project site, as depicted in the BRTR and the URS 2009 rare plant survey, showing that the density of cactus northwest of I-15 is much greater than the density of cactus in the project area southeast of I-15.	60-24
3.3-29 (1)	The document states that botanical surveys quantified several protected trees but that their specific distribution was not mapped. The distribution of trees was mapped where trees occur on the Project site. Thirteen blue palo verde and one western honey mesquite tree were mapped on the site (Please re refer to CSESA. 2012. Focused Fall Special-Status Plant Survey, Soda Mountain Solar Project. Prepared for Bureau of Land Management. October - November). These trees are not protected by State or federal law. They are only protected from commercial harvest.	60-25
3.3-30 (1)	Section 3.3.6.6 Alternative F: CEQA No Project states that a PV solar energy facility and related infrastructure could be developed on the same site under Alternative F but that a "non-groundwater" source of water would be required. Please revise to simply state that a source of water outside the Soda Mountain Valley would be required.	60-26
3.3-31 (2)	Section 3.3.7 Cumulative Effects states that the XpressWest and Calnev pipeline projects would be constructed on the northwest side of I-15 as it passes through the Project site and that vegetation resources have not been characterized in this portion of the Project site. This statement is not entirely correct. The 2009 rare plant survey for the Soda Mountain Solar Project (URS) covered a 6,770 acre area that included the portion of the Calnev pipeline adjacent to the Project site.	60-27
3.3-36	MM 3.3-4. Please include public lands enhancements as an alternate potential form of compensatory mitigation for loss of jurisdictional waters, assuming appropriate ratios are determined through CDFW, USFWS and CDFW approval. Please include performance bonds and, in limited circumstances, parent guarantees as acceptable forms of security for compensatory mitigation, in addition to pledged savings accounts and letters of credit.	60-28
3.3-33 (Mitigation Measure	The requirement in Mitigation Measure 3.3-2 to limit stockpiling of soils and topsoil and location of parking areas and staging and disposal sites in "disturbed areas lacking native vegetation and . . . not provid[ing] habitat for special status species" is too stringent. Much	60-29

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3.3-2, bullet 1)	of the Project site has native vegetation cover and, although few special status species occur on site, habitat for them is present throughout the site. To be feasible, the measure needs to be revised to state that areas occupied by special status plants must be avoided to the greatest extent possible, but, if unavoidable, may be disturbed if topsoil is salvaged and revegetation occurs nearby with success monitoring per Mitigation Measure 3.3-2(9).	60-29 cont.
3.3-33 (Mitigation Measure 3.3-2, bullet 4)	Modify the requirement for biological monitoring such that it must occur during "construction activities" rather than during "Project activities."	60-30
3.3-33 (Mitigation Measure 3.3-2, bullet 9)	Much of the Project site has less than 60 percent plant cover and density. Please qualify the coverage and density requirement to state "at least 60 percent <u>of the cover and density of similarly situated undisturbed sites within the Project vicinity"</u>	60-31
3.3-35	Item 3 states that Utah vine milkweed shall be protected from herbicide and other spoil stabilizer drift. Utah vine milkweed is not a special-status plant species. Please delete ", including Utah vine milkweed," from item 1 of the mitigation measure.	60-32
3.3-34 (Mitigation Measure 3.3-3(4g, h))	The 10-year monitoring requirement is unnecessarily long. The Draft VRMP requires monitoring and maintenance for 3 years following cactus transplanting. The 3 year requirement is consistent with other recent utility-scale solar projects on BLM administered lands within the Desert District and BLM Biologists comments on the Draft VRMP stated that the success criteria were acceptable. The Draft VRMP also includes remedial measures that will be implemented if the cactus salvage does not meet the success criteria after 3 years.	60-33
3.3-36 and 3.3-37 (Mitigation Measure 3.3-4)	Regarding Item 4f, restricting equipment maintenance within 150 feet of Waters of the State is overly restrictive given the predominance of ephemeral washes in the desert. The measure should be revised to reflect a clear performance standard such as, pollutants/contaminants (e.g., oil and grease) shall be contained and removed from the site to protect downstream water quality in accordance with state and federal laws.	60-34
3.3-43	Add the reference to the Fall 2012 rare plant survey to the reference list.	60-35
Biological Resources - Wildlife		
3.4-1 (2)	Please delete "and private lands under the land use jurisdiction of San Bernardino County" The project does not include private lands.	60-36
3.4-1 (Table 3.4-1)	Add the following survey references to Table 3.4-1: • April and May 2013 survey for desert tortoise. The 2013 survey area included 4,559 acres for the Project site and 165 acre East translocation site. • Burrowing Owl Survey. Survey dates were April to June 2013. The survey study area included the Project site and 150-meter buffer from the Project site. Please add these surveys and the corresponding references to the table.	60-37
3.4-2 (3)	Add burrowing owl to the discussion under 3.4.2.2 Wildlife Survey Methods. The burrowing	60-38

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	owl survey was conducted in spring 2013 and the survey methods should be described in this section of the document.	60-38 cont.
3.4-3 (1)	Describe the survey methods for the Spring 2013 desert tortoise surveys. Refer to Protocol Desert Tortoise Survey Report dated June 12, 2013.	60-39
3.4-4 (2)	Section 3.4.2.3 Special-Status Wildlife in the Action Area should include a reference to the CSESA Fall 2012 rare plant survey and Kiva Biological 2012 Desert Tortoise Survey. These surveys included observations (and locations) for burrowing owl, American badger, kit fox, and protocol surveys desert tortoise.	60-40
3.4-5	The following comments refer to Table 3.4-2. • Golden eagle should be in bold-face type because it was identified during surveys of the study area for golden eagle. • The black-tailed gnatcatcher was observed on site during spring and fall avian point counts in 2009 and should be shown in bold-face type, if this species is required in the table. This species does not have any special designation, nor is the species discussed further in the document. It is unclear why this species is listed in this table. • Please correct state status for bighorn sheep.	60-41
3.4-9 (2)	Please update the second paragraph with results of the 2013 protocol-level desert tortoise survey, which detected one live tortoise east of the east array.	60-42
3.4-9 (Table 3.4-3, row 6, column 3), 3.4-19 (1), 3.4-30 (1), 3.4-31 (1)	The acres of habitat types in the document are inconsistent with the number of acres that would be disturbed for the Project in Chapter 2. Please reconcile.	60-43
3.4-10 (4)	Revise "southern Rasor Road realignment corridor" to read "Alternative B BLM Proposed Rasor Road Re-Alignment Corridor". The applicant does not propose realignment of Rasor Road in this corridor.	60-44
3.4-17 (4)	The discussion of desert bighorn sheep survey results incorrectly cites the BRTR for information regarding anecdotal reports of sheep presence. The adult ewes foraging on the north end of the east array were mentioned in the Bighorn Sheep Report dated July 2013 and were not mentioned in the BRTR, which was submitted prior to the observation.	60-45
3.4-18 (2-5)	Paragraph 3. Please add language noting that "However, no bighorn sheep have been identified crossing under the two largest of these underpasses since installation of game cameras within the underpasses in August 2012." Paragraph 5. Please add language stating that both DRECP bighorn sheep intermountain habitat maps and the results of other bighorn highway crossing studies indicate that the best suited point for reestablishing bighorn connectivity across I-15 in the vicinity of the project lies one mile to the east near the junction of I-15 and Zzyzx Road because of the close proximity of mountainous terrain on either side of an approximately 90-foot wide I-15	60-46

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	underpass. Please refer to the July 2013 bighorn sheep report prepared by Panorama Environmental, Inc. for supporting details.	60-46 cont.
3.4-19 (3)	The desert kit fox survey results discussion does not include survey data collected during 2013 desert tortoise surveys, which searched for kit fox as well. More detailed mapping was performed during the Spring 2013 Desert Tortoise survey. That survey report states: "A single live adult kit fox was seen running in the North Burrowing Owl Buffer Area and Zone of Influence Area. In addition, a total of 161 canid burrows and burrow complexes were located in the South Project Site (73), North Project Site (48), South Relocation Area (38) and South Burrowing Owl Buffer and Zone of Influence Area (2)." The EIS/EIR should include the 2013 survey results.	60-47
3.4-24 (Section 3.4.4)	Section 3.4.4 Analytical Methodology should include a discussion of the hydrogeologic conditions assessment and groundwater modeling methods that were used to assess groundwater impacts to Mohave tui chub, or reference the discussion elsewhere in the EIS/EIR.	60-48
3.4-24 (2)	Please either delete the second paragraph under 3.4.4 Analytical Methodology or list all surveys conducted for the project, such as those performed in 2009 and 2013, which are unmentioned.	60-49
3.4-25	Please add APM 18 to the list of APMs in Section 3.4.5. It is specifically designed to curtail project groundwater use to avoid impacts to the Mohave tui chub.	60-50
3.4-30 (4)	In addition to briefly referencing APM 18 as justification for the effects conclusion, please specifically reference its curtailment provision, which prohibits use of groundwater within the Soda Mountain valley to the extent doing so would threaten Mohave tui chub habitat. The Mohave tui chub discussion should also mention that a groundwater model and hydrogeologic condition assessment were prepared to assess potential impacts to the spring. The model predicted that drawdown from groundwater pumping would be contained within the Soda Mountain Valley and there would be negligible or no impact to the water supply source for the spring. The mitigation measure provides additional assurance, but no impact is expected based on the model predictions.	60-51
3.4-30–31 (5)	Please revise as follows: "~~Little~~ No desert tortoise sign" is an inaccurate description for the South Array. No sign was detected in the South Array; no burrows, carcasses or scat were encountered in the area.	60-52
3.4-31 (2)	The following comments refer to the list of potential direct impacts to desert tortoise provided on page 3.4-31. • Item 4: There is no connectivity corridor for desert tortoise north and south of I-15 in the Project area. There is substantial evidence from studies in other parts of the desert that desert tortoise do not cross roads with high traffic volumes (Hoff and Marlow 2002). Survey results for the project corroborate this finding. I-15 has a very high volume of traffic (refer to the BRTR). Desert tortoise sign becomes less frequent in the East Array area closer to the highway. There is no evidence that tortoise are crossing the highway. No desert tortoises have been observed using the Opah Ditch underpass, where game cameras were installed in August of 2012. It is unlikely	60-53

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	that there is any desert tortoise connectivity across I-15 within the valley and the designation of a corridor in this area is contrary to the evidence gathered over multiple site surveys from 2009 to 2013. • Please note that baseline traffic conditions include OHV access to Rasor Road and vehicle access to the utilities (two transmission lines, underground pipelines, distribution line, cell tower) north of I-15 in unfenced corridors.	60-53 cont.
3.4-31–32 (3)	I-15 has a very high volume of traffic; it is unreasonable to attribute road kill on I-15 to the Project.	60-54
3.4-33	The last paragraph of the page states that "Surveys conducted by the Applicant and field observations by agency staff indicate that the culverts and associated major washes on and near the Project site are used by a variety of wildlife …. and potentially desert tortoise." Existing baseline conditions do not support the claim of potential desert tortoise use. There is substantial evidence from studies in other parts of the desert that desert tortoise avoid roads with high traffic volumes (Hoff and Marlow 2002). Survey results for the project corroborate this finding. I-15 has a very high volume of traffic (refer to the BRTR). Desert tortoise sign becomes less frequent in the East Array area closer to the highway. There is no evidence that tortoise are crossing under the highway. No desert tortoises have been observed using the Opah Ditch underpass, where game cameras were installed in August of 2012. It is unlikely that there is any desert tortoise connectivity under I-15 within the valley. In short, other wildlife may use these culverts, but all evidence indicates that desert tortoises are not approaching or passing over or under the I-15 highway because the I-15 highway is an existing barrier to desert tortoise connectivity within the valley. Further, the Project would not create a new barrier to desert tortoise connectivity within the valley because access to the culverts would remain after construction is completed.	60-55
3.4-34 (6)	Please add the results of the Spring 2013 Phase II and Phase III spring burrowing owl surveys conducted by Kiva Biological Consulting to the Western burrowing owl discussion. During the Phase II burrow surveys 237 burrows were recorded. Of these, 50 burrows were observed with some type of associated owl sign. The observed sign showed some degradation; none appeared to be from Spring 2013. No owl tracks were observed at any burrow. No burrowing owls were observed on the site during Phase III surveys in Spring 2013. The survey results indicate that the Project site is not used for breeding in all years and the estimate of 13 owls is conservative given that none were observed during the spring breeding season.	60-56
3.4-37 (4)	The focused CDFW surveys for desert bighorn sheep were conducted in 2012. The document states that they were conducted in 2013.	60-57
3.4-39 (3, 4)	The following comments refer to the golden eagle discussion on page 3.4-39. • The potential golden eagle nest site was not discussed previously. The nest was not observed during BLM or Applicant surveys and use has not been documented by BLM. • There would be a short segment of overhead line to tie in the substation and switchyard to the transmission line. The new segment of overhead line is approximately 1,000 feet. See APM 49. The short segment of overhead line is also discussed on the next page.	60-58
3.4-40 (2)	Impacts to birds from the brine ponds would be minimized or avoided by implementation of	60-59

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	Mitigation Measure 3.4-1g, as well as APM 59. Please include a reference to APM 59.	60-59 cont.
3-4-41 (4)	The EIS/EIR states "The bighorn sheep habitat suitability report, included in the BRTR prepared for the Project by Panorama Environmental, Inc…acknowledge that the model incorrectly underestimated suitable habitat in the south Soda Mountains where sheep are known to occur." This statement is inaccurate. The DRECP Baseline Biology Report included a habitat suitability model that underestimated the extent of bighorn sheep habitat in the south Soda Mountains as noted in comments by Soda Mountain Solar dated July 24, 2012. The DRECP bighorn sheep habitat suitability models were subsequently revised to incorporate CDFW data regarding bighorn sheep use of the South Soda Mountains and the updated expert species models were presented in the DRECP Description and Comparative Evaluation of Draft DRECP Alternatives. These results were fully incorporated into the BRTR - for an example, please refer to Figure 3.3-12 of the BRTR – as well as in the separate bighorn sheep report prepared by Panorama (Bighorn Sheep Survey Results and Analysis (2013)).). In other words, the reports prepared by Panorama were used to correct the DRECP models, not the other way around.	60-60
3.4-41 (4)	The EIS/EIR states "While it may occur infrequently, the north-south movement of bighorn sheep across I-15 in the study area is important to maintaining the sheep metapopulation within the Soda Mountains". Replace "maintaining" in this sentence with "restoring". This statement is inaccurate in that it asserts that there is existing movement of bighorn sheep across I-15 through the Project area. There is no evidence of bighorn sheep movement across I-15 and there is substantial evidence to the contrary. Bighorn sheep have not been observed using the culverts during photographic monitoring since August 2012 and there is no sign of bighorn sheep in the north Soda Mountains. The bighorn sheep metapopulation within the Soda Mountains was colonized from the Cady Mountains to the south. There is no existing connectivity between the population of bighorn sheep in the Soda Mountains and the population of bighorn sheep north of the project in the Avawatz Mountains. There is interest in <u>restoring</u> bighorn sheep connectivity across I-15 near the Project, but that genetic link does not currently exist. Please also revise the following phrase "short lived ~~regional~~ <u>local</u> movements" to reflect the above.	60-61
3.4-43 (3) and 3.4-44 (2)	The following comment refers to impacts identified under Alternative B as described on page 3.4-43 and 3.4-44. • The BLM Proposed Rasor Road Realignment included in Alternative B is located south of the Project and within an area of Mojave fringe-toed lizard habitat. Alternative B would result in greater impacts to Mojave fringe-toed lizard habitat and greater likelihood of direct impacts to individuals. Mojave fringe-toed lizards were observed in the BLM Proposed Rasor Road Realignment corridor during Project surveys.	60-62
3.4-44 (8), 3.45 (1)	The following comments refer to impacts identified under Alternative C as described on page 3.4-45. • The EIS/EIR states "Sheep would not need to travel between solar arrays under this alternative; thus, there may be some benefits related to retention of movement corridors." Photographic monitoring at Opah Ditch since August 2012 indicates bighorn sheep are not moving across I-15 through the underpass within the valley.	60-63

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	The Alternative would not retain a movement corridor since it does not currently exist. This statement should be modified to read "…retention of a potentially restorable movement corridor."	60-63 cont.
3.4-48 (2)	The discussion of Migratory Birds (Nesting) on page 3.4-48 should include a discussion of APM 55, which requires preconstruction avian clearance surveys and restricts vegetation clearing to outside of the breeding season to the maximum extent practicable.	60-64
3.4-49	ISEGS avian mortality figures should not be used for comparison because that project involves an entirely different technology (heliostat mirrors and power tower).	60-65
3.4-50 (2)	The approved XpressWest Project has a much greater potential to impede bighorn sheep connectivity restoration efforts than the proposed Project. In the absence of the proposed action, the XpressWest Project would block potential future restored movement between the north and south Soda Mountains. The XpressWest mitigation requires construction of bighorn sheep fences in the mountains near Zzyzx Road where the potential for restored bighorn sheep connectivity is greatest. This measure would not only block restoration of bighorn sheep access to the culverts, but also restoration of bighorn sheep access through the mountains. These effects would occur as a result of XpressWest alone, and in the absence of the proposed Project.	60-66
3.4-51 (Mitigation Measure 3.4-1a)	Mitigation Measure 3.4-1a requires that an individual biologist be designated and approved by BLM. Individual should be revised to individual(s). There may be a need for multiple designated biologists due to personnel changes and to accommodate construction work schedules/vacations. Item 3 requires that the designated biologist conduct daily compliance inspections. Item 3 should be revised by replacing "Conduct compliance inspections daily" with "be on-site daily". Daily inspections are typically performed by biological monitors rather than the designated biologist. It is unrealistic to expect the designated biologist to perform all of the daily sweeps and manage the biological monitoring for such a large site.	60-67
3.4-52 (Mitigation Measure 3.4-1b)	Measure 3.4-1b, Item 5 requires that any non-listed, special-status ground-dwelling animal found on site be relocated to adjacent suitable habitat at least 200 feet from construction. This requirement is inconsistent with agency guidance for kit fox and American badger and does not acknowledge breeding season restrictions in relocating these species. Please revise this requirement to state that, if relocation is necessary, desert kit fox and American badger would be relocated at an appropriate time, place, and manner consistent with CDFW guidance.	60-68
3.4-51 (Mitigation Measure 3.4-1b)	Mitigation Measure 3.4-51 currently requires Biological Monitors during operation and maintenance (in addition to during pre-construction surveys and construction activities). Please revise the provision to limit the Biological Monitor's post-construction activities to post construction biological monitoring imposed as an APM or otherwise required by a Project approval.	60-69
3.4-52 (Mitigation Measure 3.4-1b(4))	Please revise item 4 to apply to the extent practicable; some species can be extremely hard to detect even if present. Please revise Item 6 to allow escape ramps to be installed as an alternative to creating an earthen ramp.	60-70
Mitigation	Mitigation Measure 3.4-1c Requires a Worker Environmental Awareness Program (WEAP).	60-71

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Measure 3.4-1c	Revise Item 9 by adding "that are applicable to their work" at the end of the sentence.	60-71 cont.
Mitigation Measure 3.4-2a	Item 2(d) discusses requirements for inspections of the desert tortoise exclusion fence. In Item 2(d) 6 lines down, delete "and during" from the sentence. It could be unsafe to inspect the fence during a major rainfall event. Add the word "damaged" after "all" and before "temporary" in the last sentence of Item 2(d).	60-72
3.4-53 (Mitigation Measure 3.4-1(d))	Please include a provision requiring a 15-mile-per-hour speed limit during operations (not just construction) for all access roads outside of permanent desert tortoise fencing.	60-73
3.4-54 (Mitigation Measure 3.4-1f(5))	Revise the last line of Item 1 to "within 500 feet (150 meters) during the breeding season". 500 meters is much larger than 650 feet; the measure as written is not consistent with the Staff Report. Revise line 3 or Item 2 to read "passive relocation of owls may be implemented prior to construction activities in each work area…" SMS may construct the Project and relocate owls in phases. Revise line 1 of Item 3 to read "Unless otherwise authorized by the designated biologist a 500 foot buffer…"	60-74
3.4-54 (Mitigation Measure 3.4-1g)	Mitigation Measure 3.4-1g requires the Applicant to prepare a BBCS with a raven management component. The Draft BBCS was submitted to all agencies. The applicant has proposed preparation of a separate Raven Monitoring and Control Plan. Refer to APM 72	60-75
3.4-54 (Mitigation Measure 3.4-1f(5))	Please remove the requirement that off-site habitat would be in areas where turbines would not pose a mortality risk. No wind turbines are proposed for this project.	60-76
3.4-54 (Mitigation Measure 3.4-1f(5))	Because this EIS establishes nested compensatory mitigation lands on the basis of desert tortoise rather than vegetation community impacts, in the last sentence of Mitigation Measure 3.4-1f(5), please replace "sensitive vegetation communities" with "desert tortoise habitat or other habitat and/or natural communities"	60-77
3.4-54 (Mitigation Measure 3.4-1g)	Add the following sentence after sentence 1 of Mitigation Measure 3.4-1g: The BBCS shall include measures to mitigate for the effects to birds, such as minimizing disturbance, preconstruction surveys, and minimizing effects to nests during breeding season.	60-78
3.4-54 (Mitigation Measure 3.4-1h)	The requirements for avian use surveys in Item 1 of Mitigation Measure 3.4-1h, should be replaced with avian behavior surveys because use surveys are inappropriate for assessing the potential effects of solar PV arrays on avian species. Common problems with avian use surveys include: 1) Hundreds or thousands of hours of use surveys are often required to detect a single individual of special-status or rare species 2) Use surveys are poor at detecting some species (e.g. burrowing owl, great-horned	60-79

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	lark, barn owl, common poorwill, and common nighthawk) 3) Use rates shift spatially over time 4) Use rates can be biased when compared to fatality rates because of substantial seasonal trends in relative abundance 5) Detection rates decline with distance from the observer 6) Detection rates are influenced by the visual background and can bias the use rate 7) Survey duration affects use rate estimates Avian behavior surveys are much more effective than use surveys for predicting impacts, understanding the factors related to project impacts, and finding solutions to reduce, rectify, and offset future impacts. A single year of behavior surveys is generally sufficient to document avian behavior. Behavior surveys, if implemented correctly, should be free of the substantial biases frequently imbedded within use survey results. We also request removal of the radar survey requirement of item 2(b) of Mitigation Measure 3.4-1h. Avian use rates derived from radar surveillance suffer from a number or problems. Species identifications are often not possible, or are based on assumptions about size class, flight speed, flock size, and time of night when the radar target(s) was observed. Visual confirmation of radar targets is rare, often ranging between 0% and 2%. Radar is unlikely to provide the species-specific information that one needs to understand collision rates or causal factors. Thermal imaging is a superior nocturnal monitoring method. Thermal imaging allows the observer to both identify animals to the species level and observe their behaviors to see how birds and bats react to the solar infrastructure. Thermal imaging also should be used instead of bat acoustic sampling. The baseline bat survey for the project indicated that Townsend's big-eared bats are often not detected with acoustics, for example. Please remove the off-site survey requirement of Item 1 of Mitigation Measure 3.4-1h, as well. Comparison of onsite data with offsite control plots will cause spatial confounding. The project site and offsite landscape characteristics (e.g., vegetation, soils, slope) differ and avian use and behavior will reflect these differences in landscape characteristics. The comparison of avian use or behaviors rates on and off site will always be compromised by lack of treatment replication and interspersion. It is therefore recommended that the offsite monitoring requirement be removed. Pre-construction detection trials will not be valuable to assessing post-construction detection rates. The scavenger community and scavenger behaviors will change once the project is built. Searcher detection rates will also change. Comparing carcass detection rates before and after construction will not provide any useful insight into fatality rates and no adjustments to fatality rates will be possible based on preconstruction detection trials. Item 3(c) of the Avian Monitoring Program should be deleted because the scavenger and searcher efficiency trials are covered by integrated detection trials in 3(b). The requirement for seasonal trials should be replaced with an integrated detection trial which covers all seasons by design. Finally, the goal of this avian monitoring program is to understand, reduce and off-set impacts to avian species. It is recognized in the EIS/EIR that the solar project cannot completely avoid or eliminate impacts, particularly given the recent discovery of a potential "lake effect" of solar PV technologies on avian species. Accordingly, please delete the terms "avoid" or "eliminate" impacts from the mitigation measure. These comments have been incorporated into our proposed edits to Mitigation Measure 3.4-1h, below.

60-79 cont.

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	Avian Monitoring Program. An Avian Monitoring Program shall be initiated and approved pre-construction and continue for at least one year ~~three years~~ following commercial operation (~~and longer~~ and potentially up to three years if determined necessary and appropriate by the Compliance Project Manager (CPM)) that shall include, at a minimum, the following provisions: 1. The Project owner will survey and monitor on-site ~~and off-site~~ avian ~~use and~~ and bat behavior to document ~~species composition on and offsite~~avian and bat reactions to the project and to infer causal factors, if any, to project impacts~~, compare onsite and off-site rates of avian and bat use, document changes in avian and bat use over time (pre and post construction), and evaluate the changes in annual abundance and distribution of birds in and near the facility~~. The Project owner will submit all data gathered onsite to the CPM as specified herein, or as requested by the CPM, and also will make consulting biologists available to answer CPM inquiries. 2. The Project owner will implement a scientifically defensible ~~statistically robust~~ avian and bat ~~mortality~~fatality and injury monitoring program to accurately estimate the rates of collision-caused fatalities and injuries and to enable comparisons of project impacts through time and to other projects that are also monitored for collision-caused fatalities ~~identify the extent of potential avian or bat mortality or injury from collisions with facility structures~~, including: a) ~~assessing~~ estimating levels of collision-related mortality and injury with PV panels, perimeter fences, gen-tie line poles or wires, and other project features and structures; b) ~~documenting~~ quantifying flight ~~spatial~~patterns and behaviors via ~~radar~~diurnal behavior surveys and nocturnal thermal imaging surveys, and comparing these patterns to~~that may be associated with~~ collision-related mortality and injury to infer associations, if any. 3. The Project owner will implement an adaptive management and decision-making framework for reviewing, characterizing, and responding to monitoring results. 4. The Project owner will identify specific conservation measures and/or programs to ~~avoid,~~ minimize, rectify, reduce, or ~~eliminate~~ offset project-caused avian injury or mortality over time and will evaluate the effectiveness of those measures. The Avian Monitoring Program shall include the following components: 1. A description and summary of the baseline survey methods, raw data, and results. 2. Full survey methodology and field documentation, identification of appropriate ~~onsite and offsite~~ survey locations, control sites, and ~~the~~ seasonal considerations. ~~Bat acoustic sampling may be implemented depending on results of the Project owner's baseline studies, including preconstruction data.~~ 3. Avian and bat mortality and injury monitoring that includes: a) Onsite monitoring that will ~~systematically~~ periodically survey representative locations within the facility, and in combination with an integrated carcass detection trial, will produce accurate project-wide impact estimates~~, at a level that will produce statistically robust data; account for potential spatial bias and allow for the extrapolation of survey results to non surveyed areas and the survey interval based on scavenger and searcher efficiency trials and detection rates~~. b) Low-visibility and high-wind weather event monitoring to document potential weather-related collision risks ~~that may be associated increased risk of avian or bat collisions with project features~~, including foggy, highly overcast, or rainy night-time weather typically

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	associated with an advancing frontal system, and high wind events (40 miles per hour winds) that are sustained for ~~period of greater than~~longer than 4 hours. The monitoring report shall include ~~survey~~ study design (including integrated detection trials), search frequency, search locations and field methods. ~~c) Statistically robust scavenger and searcher efficiency trials prior and post construction to document the extent to which avian or bat fatalities remain visible over time and can be detected within the project area and to adjust the survey timing and survey results to reflect scavenger and searcher efficiency rates~~ d) Statistical methods used to generate facility estimates of potential avian and bat impacts based on the observed number of detections during standardized searches and adjusted by integrated detection trials.~~during the monitoring season for which the cause of death can be determined and is determined to be facility related.~~ e) Field detection and mortality or injury identification, cause attribution, handling and reporting requirements. 4. All post-construction monitoring studies included in the Avian Monitoring Program shall be conducted by a third party contractor for ~~at least~~ one year and up to three years following commercial operation and approval of the Avian Monitoring Program by the CPM. All surveys and monitoring studies included in the Avian Monitoring Program shall be conducted during construction and commercial operation. At the end of the ~~three year~~ one year period, the CPM shall determine whether the survey program shall be continued. 5. An adaptive management program shall be developed to identify and implement reasonable and feasible measures that would reduce levels of avian or bat mortality or injury attributable to Project operations and facilities. 6. Monitor the death and injury of birds and bats from collisions with facility features. The monitoring data shall be used to inform an adaptive management program that would ~~avoid and~~ minimize Project-related avian and bat impacts. The study design shall be approved by the CPM in consultation with CDFW and USFWS. The Avian Monitoring Program shall include detailed specifications on data and carcass collection protocol and a rationale justifying the proposed schedule of carcass searches. The program also shall include ~~seasonal trials~~an integrated detection trial to estimate the proportion of fatalities not found during periodic searches. ~~assess bias from carcass removal by scavengers as well as searcher bias~~.	60-79 cont.
3.4-56, 3.4-57, and 3.4-58 (Mitigation Measure 3.4-2a)	Mitigation Measure 3.4-2a Please revise the last sentence of the first paragraph as follows: "These measures include, but are not limited to, the following, subject to modification by the terms of incidental take authorizations issued by the USFWS and CDFW:" Please remove "in the utility corridors" from the first full sentence under item 2d. A portion of the Project is within a BLM Utility Corridor; however, the fence should be inspected equally throughout the Project site. This language was likely taken from another project and does not apply to the SMS Project.	60-80
3.4-60 (Mitigation Measure 3.4-2(d))	Mitigation Measure 3.4-2d. Please add the following sentence to the end of the first paragraph of the mitigation measure: The Project owner may also satisfy the requirements of this condition through the enhancement of public lands at different ratios in substantial conformance with the intent	60-81

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	of this mitigation measure if acceptable to BLM and if acceptable to USFWS and/or CDFW. Please add the following sentence to the end of the second paragraph: If compensation lands are acquired in fee title or in easement, the requirements for acquisition, initial improvement, and long-term management of compensation lands include all of the following, subject to modification by the terms of incidental take authorizations issued by the USFWS and CDFW:	60-81 cont.
3.4-60 (Mitigation Measure 3.4-2(d)(1)(a))	The Project area is immediately west of the Eastern Mojave Recovery Unit. Please revise the measure to allow location of compensation lands in Western Mojave Recovery Unit or, with prior USFWS approval, within the Eastern Mojave Recovery Unit.	60-82
3.4-64 (Mitigation Measure 3.4-3)	Mitigation measure 3.4-3 requires funding to CDFW to install 3 to 5 water sources for bighorn sheep. Because there is currently no connectivity occurring under baseline conditions, and the situation would not change as a result of the proposed Project, no mitigation is warranted. However, the applicant is willing to agree to amend APM 75 to include an additional one to three water sources on the same terms as mitigation measure 3.4-3.	60-83
3.4-64 (Mitigation Measure 3.4-4)	Mitigation Measure 3.4-4 describes the protocol for when active nests are found on site. Typically, a reduced buffer is allowed depending on the species and the level of activity. Please revise the measure to allow the biologist some discretion, in consultation with the BLM biologist, to reduce the buffer if it will not cause abandonment of the nest. The 3-day limit for nesting bird surveys prior to construction will be very difficult to implement due to the large area that will need to be surveyed, the difficulty in determining the exact date that construction will start, and weekends. The 3 days should be revised to 7 days. The Biological Monitor should also be able to determine a nest is no longer active. Add "or Biological Monitor(s)" after Designated Biologist.	60-84
3.4-64 (Mitigation Measure 3.4-5a(1))	Mitigation Measure 3.4-5a, item 1 discusses vehicles speeds; this measure should be deleted and replaced with a reference to Mitigation Measure 3.4-1d, which also discusses speed limits and distinguishes between roads within and without permanent desert tortoise fencing.	60-85
3.4-68 (Impact Wild-5)	As stated in the July 2013 Project bighorn sheep report submitted to BLM and as further explained in the comments below, the Project does not impact bighorn sheep connectivity because there is no connectivity occurring across the project site under existing baseline conditions. No mitigation is therefore warranted. However, as also stated in the bighorn sheep report and above in response to Mitigation Measure 3.4-3, as well as evidenced by APM75, the applicant is willing to assist with restoration efforts focusing on the installation of water sources in the vicinity of the proposed Project area.	60-86
3.4-68 (Impact Wild-5)	The determination of significant and unavoidable adverse effect on bighorn sheep is inconsistent with the EIS/EIR's CEQA thresholds of significance and the results of the Project studies for bighorn sheep. The significance thresholds that were used to assess impacts on bighorn sheep include: *a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;*	60-87

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	d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; The EIS/EIR states, "Project-caused habitat modifications could have a significant effect on behavior and habitat use, including the ability or willingness of sheep to cross I-15 and move within or through the Project site." This determination of a significant effect is inconsistent with threshold (a). A "substantial adverse effect" to bighorn sheep would not occur from the minimal loss of suitable foraging habitat within the Soda Mountain Valley. The project footprint includes small areas of suitable foraging habitat (defined as areas within 0.5 mile of the 20 percent slope). This minimal loss of foraging habitat would not result in substantial adverse effects to bighorn sheep because there are substantial areas of suitable habitat in and around the base of the Soda Mountains that would not be affected by the Project. Current bighorn sheep use of the Project valley is minimal. Some scat has been identified along the margin of the valley and bighorn sheep have been observed along the hill slopes adjacent to the East Array, but the vast majority of the local population frequents the east side of the south Soda Mountains due to the availability of water near Zzyzx Springs. The impact of the project to this limited usage on the west side of the south Soda Mountains would not be a substantial adverse effect to the species. The EIS/EIR also states "The Project would negatively impact the ability to reestablish bighorn sheep connectivity across I-15 in the Soda Mountains. The only portions of the Project ROW where bighorn sheep presently can cross I-15 safely are at highway underpasses or overpasses. Multiple large culvert underpasses would become less accessible to sheep following Project implementation. This would be a significant impact…" This determination of significant effect is inconsistent with threshold (d). The Project will not "interfere substantially" with the movement of bighorn sheep. The statement in the EIS/EIR addresses future reestablishment of connectivity as opposed to the current movement of sheep. The significance threshold does not define impacts on some future potential corridor, but rather on "established" wildlife corridors. CDFW has used wildlife cameras to monitor the highway underpasses at Opah Ditch and Zzyzx Road since August 2012. No bighorn sheep use of these underpasses has been observed since monitoring began. The Project could not substantially interfere with movement in these underpasses because movement through these underpasses does not currently exist. In addition, the Project has been designed to avoid the base of the mountains where sheep may forage, and the drainages leading from the mountains to the culverts will remain open and unimpeded by the proposed Project. Moreover, baseline concerns aside, the Project would not interfere with movement of bighorn sheep north of the Project near Zzyzx Road, which is the most likely area for bighorn sheep to move between the north and south Soda Mountains due to the proximity of mountainous areas on either side of the I-15 freeway in that location. Because there would be no substantial interference with existing movement of bighorn sheep, the impact is in fact less than significant.	60-87 cont.
3.4-69 (Impact Wild-6)	See our page 3.4-50 (2) comment above regarding the effect of the Xpress West Project on potential bighorn connectivity restoration efforts. The Proposed Project's contribution to this effect would be minor relative to the impacts of the Xpress West Project and I-15 highway. The Project would not affect bighorn sheep connectivity individually and would not considerably contribute to cumulative impacts to connectivity.	60-88
3.4-71	Section 3.4.10.2 states that Alternative B would have similar bighorn impacts. Please change to reflect statement on page 3.4-44 that Alternative B would have fewer connectivity	60-89

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	impacts by removing the northern array.	60-89 cont.
3.4-76	Please add a reference to the Spring 2013 Burrowing Owl Survey Report prepared by Kiva Biological Consulting.	60-90
Geology and Soil Resources		
3.7-25 (2)	Replace "significant" rainfall event" in the first sentence with "qualified storm event". A qualified storm event is defined in the State of California Stormwater General Permit.	60-91
Mitigation Measure 3.7-1	Paragraph 2 of Mitigation Measure 3.7-1 requires straw wattles or other measures to be used where desert tortoise fencing creates spoil piles or excess soil. This language is too broad and may require a straw wattle along the entire length of the desert tortoise fence. This would increase the level of disturbance while not necessarily reducing erosion. Either delete the specific requirement for BMPs along the desert tortoise fence, or revise this measure to only require BMPs where desert tortoise fencing creates substantial excess soil. Paragraph 3 specifies monitoring and repair requirements for erosion control facilities. The requirement that repairs be made within 24 hours is too strict and is likely infeasible following major events. Repairs can be made within 7 days. The last sentence of this paragraph is also too stringent. BMP repairs and maintenance are typically ongoing throughout the life of the Project. Construction on the entire Project should not be stopped if there is a straw wattle that is loose or a silt fence that has a small tear. The word "Any" should be replaced with "Substantial" in the last sentence.	60-92
Hazards and Hazardous Materials		
3.8-1 (6) 3.8-17	In addition to the private air strip located at the Desert Studies Center site, there is also a small private air strip next to the Rasor Road service station, associated with an "Old FAA Beacon" identified on a 1983 USGS topo map.	60-93
3.8-18 (3)	Please add a reference to Table 2-3 for quantities of hazardous substances.	60-94
3.8-18–19 (5), 3-8-28 (2)	Section 2.4.2.10 states that an SPCC Plan may be required by San Bernardino Fire Department (SBCFD). The Applicant will prepare and submit an SPCC Plan to the SBCFD if the Project will include storage capacity of 1,320 gallons or more (in aggregate), as required by EPA rule.	60-95
Lands and Realty		
3.9-19(1)	Please clarify that despite potentially exceeding the federal de minimis levels during construction, the project would not exceed these levels in the specific project areas that are included in the calculations for comparison against these thresholds (as explained in the General Conformity section of our Air Quality section comments, above).	60-96
Noise		
3.11-15	Mitigation Measure 3.11-1 Please delete the restriction against construction and decommissioning activities on Sundays and apply the same restrictions as all other days of the week.	60-97
Paleontological Resources		

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3.12-9 (5)	Line 5: Please revise to state "where excavations disturb areas with PFYC designations of 3, 4, and 5" Otherwise, a monitor must be present during all excavation of "older alluvium," which is not defined in the EIS.	60-98
3.12-10	Mitigation Measure 3.12-4: Please revise the measure to limit activities only in the immediate vicinity of the fossil until it is salvaged.	60-99
Recreation		
3.13-14 Mitigation Measure 3.13-2	The requirement to fund preparation of a management plan for Rasor OHV is without foundation in the effects analysis of the DEIS/DEIR and should be deleted. The DEIS/DEIR identifies potential noise, dust and visual effects of travelers to and from the Rasor Road OHV area during project construction, but each of those effects are already separately addressed in the noise, air quality and visual APMs and mitigation measures of the Proposed Project and DEIS/DEIR, respectively.	60-100
3.13-16(1)	Para. 1, 11th Line: insert: "other than those already implemented on a resource-by-resource basis as discussed in other chapters of this PA/EIS/EIR".	60-101
3.13-17(3)	Para. 3, 8th Line: insert: "beyond those already implemented on a resource-by-resource basis as discussed in other chapters of this PA/EIS/EIR".	60-102
Socioeconomics and Environmental Justice		
3.14-12(6)	Para. 6, Line 3: Please add Biological Resources and Cultural Resources because they are discussed at 3.14-17 and 3.14-18. Para. 6, Line 5: Insert: "3.17, Utilities and Public Services;"	60-103
Transportation and Travel Management		
3.16-18 (2)	This comment refers to impact question (c) under section 3.16.10.1 Alternative A: Proposed Action. Clarify which airstrips the word "neither" refers to (e.g., Desert Studies Center and/or Rasor Road station). Baker has an airstrip, and it is in use, so the third sentence here is confusing.	60-104
Visual Resources		
3.18-8	The DEIS/DEIR identifies an interim VRM Class III designation for the Project site, noting that a VRM Class IV designation did not apply because the "Project setting is mostly undisturbed with its natural beauty and harmony dominating the views." We request that BLM reconsider the VRM Class III designation, which appears to have been made on the basis of the same inventory values, such as natural beauty and harmony, that gave the Project site a VRI Class III designation. The decision to retain the same VRM Class designation as the Project site's VRI Class designation appears to have been made without consideration of the management objectives embodied in the use designations of the project site and as implemented in past and approved development nearby. As stated in BLM's national guidance: "Inventory classes are not intended to automatically become VRM class designations. Management classes are determined through careful analyses of other land uses and	60-105

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	demands. The VRM classes are considered a land use plan decision that guides future land management actions and subsequent site-specific implementation decisions. … Class determination is based on a full assessment that evaluates the VRI in concert with needed resource uses and desirable future outcomes. The VRM class designations may be different than the VRI classes assigned in the inventory and should reflect a balance between protection of visual values while meeting America's energy and other land use, or commodity needs." IM No. 2009-167 (7 July 2009), page 1. Taking this guidance into consideration, as well as (i) the Project site's Multiple Use Class designations (all of which allow utility-scale solar), (ii) the amount of development that has been undertaken and/or approved in the project study area (Interstate 15 freeway, transmission lines, XpressWest high speed rail, Calnev pipeline), and (iii) the designation of most of the valley as a national utility corridor pursuant to an act of Congress, we are of the firm opinion that a VRM Class IV designation is more consistent with IM No. 2009-167 and the management decisions made to date within the Soda Mountain Valley. This is particularly fitting in the solar context because the Project site meets all SEZ screening criteria except one requiring a slope of two degrees or less (portions of the site are sloped up to 4 percent).	60-105 cont.
3.18-22(3)	Please consider revising VRM conformity conclusion to reflect an Interim VRM Class IV designation, per preceding comment.	60-106
3.18-25 (2) and 3.18-33 (Mitigation Measure 3.18-1)	This comment refers to the proportionality of Mitigation Measure 3.18-1 relative to the environmental impact identified. The mitigation measure calls for a "Glint and Glare Assessment, Mitigation, and Monitoring plan that accurately assesses and quantifies potential glint and glare effects and determines the potential health, safety, and visual impacts associated with glint and glare." There is no nexus for requiring the development of a glint and glare plan based on the analysis and on the level of identified impact. The Draft PA/EIS/EIR states that "the Project is analyzed for adverse effects of lighting and glare" (Page 3.18-14). It is also stated that "the use of PV technology is generally regarded as causing minimal glint and glare impacts" and that the analysis "recognizes that Solar PV employs glass panels that are designed to minimize reflection and reflect as little as 2 percent of the incoming sunlight. (FAA, 2010)." (page 3.18-23). The conclusion regarding glint and glare impacts in the PA/EIS/EIR is that "the color contrast of the solar panels during certain times of the day when the viewer is positioned in line with the sun would momentarily increase, but not to such an extent as to result in a change in the severity of the contrast rating in Table 3.18-4." (page 3.18-25). The Project facilities will be in view of motorists on I-15 for less than 5 minutes. It can be determined that the impact from glint and glare is less than significant because there would be no change in the severity of the contrast rating to "strong" and therefore no new source of substantial glare which would adversely affect daytime or nighttime views in the area.	60-107
3.18-26	Bullet point item 2 should be revised to state "may view the North Array area" to "may view the South Array area"	60-108
3.18-34 (Mitigation Measure 3.18-1)	This comment refers to the feasibility of implementing Mitigation Measure 3.18-1, Item 1 and Item 4. ***Item 1.*** The conclusion of less than significant glint and glare impacts is discussed in the previous comment. This visual dynamic does not represent a significant impact when considered in light of other mitigation measures related to light and glare. The basis for screening the solar arrays from view to reduce glare from the surface of the panels is not	60-109

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	warranted nor would screening be practical. Constructing berms as suggested would have a secondary impact on water resources, vegetation, and habitat that would be counter to Mitigation Measure 3.18-2, Item 1 (Table ES-2 , page ES-37; page 3.18-34) to minimize areas of surface disturbance and Measure 3.19-2, Item 3 which requires placement of berms outside of active drainage channels. Additionally, the fencing with privacy slats creates an enhanced contrast impact with the characteristic landscape. ***Item 4.*** Coloring the back side of collectors is not "roughly proportional" to the impact. While the backs of many manufactured panels will be flat-white to light grey in color, they are almost always in shadow (and therefore not creating a significant contrast) because the other side of the panel is positioned to capture maximal sunlight.	60-109 cont.
3.18-34 (Mitigation Measure 3.18-1)	This comment refers to conflicts between Mitigation Measure 3.18-1 Siting and Design, Item 1 and Item 4a. Item 4a requires that security fencing be coated with black poly-vinyl or other visual contrast reducing color (Item 4a), whereas Item 1 requires use of fencing with privacy slats Additionally, the use of fencing poly-vinyl or privacy slats to reduce glare actually enhances contrast impacts on the landscape.	60-110
3.18-36 (Mitigation Measure 3.18-2)	This comment refers to the proportionality of Mitigation Measure 3.18-2, Item 6 relative to the environmental impact identified. There is limited use of graveled surfaces within the Project site. The use of gravel is only proposed at the substation and at the Operations and Maintenance facility. The color contrast of the gravel is expected to be minimal and the areas where gravel would be used are set back from the highway, superior in elevation to the highway, and minimally visible. There is no significant visual impact from the proposed use of gravel at the Project site.	60-111
3.18-38 (1, 2)	The following comments refer to Section 3.18.9 Residual Effects. • The statement that "nearby landscapes such as the Mojave Natural (sic) Preserve, which contains a ridgeline boundary within the viewshed of the Project, experiencing residual effects with the transformation of the valley of the Soda Mountains at the base of the ridge" should be deleted. This statement is not defensible because there is little to no use of the ridgeline (p. 3.13-2). • The explanation characterizing the impact on visitors passing through the Project area states that the experience of recreationists will be disrupted to the point that it results in an unavoidable impact. This takes out of context the impact conclusion of the recreation analysis that notes "while the Project is proposed within an existing transportation and utility corridor, it would significantly change the visual appearance and visitor experience along these primary access routes if it is constructed. However, the visual impacts would be minimal once visitors reach their destinations in Rasor OHV Recreation Area, Mojave National Preserve, and Soda Mountain WSA" (page 3.13-9). • There are very few individuals who live within view of the Project area – the Project is not visible from Baker. • The last paragraph addressing cumulative impacts has been addressed in Section 3.18.17 and does not belong in this section.	60-112
3.18-40 (3)	The last paragraph under Impact Vis-1 is a discussion of cumulative impacts. It is misplaced	60-113

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	and belongs in other sections.	60-113 cont.
3.18-42 (4)	Relating glare to views from I-15, the analysis under Impact Vis-5 states "This glare could occur in any one place for several hours (e.g., a sunny afternoon) but is unlikely to be visually distracting or nuisance causing." (page 3.18-43). This is unlikely because all viewers would be in motor vehicles and their positions will be mobile, and any glare that may be generated would be highly ephemeral and short-lived as seen from any one location by travelers. Travelers on I-15 would have views of the Project for less than 5 minutes.	60-114
Figure 3.18-10 and 3.18-11	The introductory text that describes the visual simulations should be modified to state that the simulations present a worst-case condition. The Project proposal has been modified to reduce the footprint of the arrays and break up the array areas. The visual contrast resulting from the current Project proposal would therefore be less than the contrast presented in the visual simulations (Figures 3.18-10 and 3.18-11).	60-115
ES-40 and 3.18.14 (Mitigation Measure 3.18-1)	Mitigation Measure 3.18-1, Item 3 discusses patrol roads. Patrol roads are not included in the Project.	60-116
Water Resources		
3.19-11 (1)	The Clean Water Act does not apply to the Project because the waters in the Project area are not subject to federal jurisdiction under the Act.	60-117
3.19-18 (2)	Please add a reference to the 2013 addendum prepared by TRC Solutions.	60-118
3.19-20 (3)	A Notice of Intent will not be submitted. An NOI is required to obtain coverage under the NPDES General Permit. Because waters are not subject to federal jurisdiction under the Clean Water Act, the Project cannot obtain coverage under the General Permit. Replace NOI with Application for Waste Discharge Requirements for Projects Involving Discharge of Dredged and/or Fill Material to Waters of the State. This application is the same as the Application for 401 Water Quality Certification.	60-119
3.19-13 (3) 3.19-20 (3) 3.19-23 (3) 3.19-46 (2)	The R6T-2003-004 permit only covers up to 1 acre of impact. The appropriate permit is the Waiver of Waste Discharge Requirements. This paragraph should be revised to reflect the correct regulatory authorities and permits. An individual permit is anticipated. The discussion regarding decommissioning states that the construction activities and land disturbance would require coverage under General Permit R6T-2003-004. As stated above, the Waiver of Waste Discharge Requirements is appropriate.	60-120
3-19-30 (2)	The last sentence of the second paragraph should be revised to replace "occurs" with "is likely to occur". There is no possibility that the 72-hour aquifer test could be perceptible 5 miles away in the Mohave tui chub habitat at Soda Springs.	60-121
3.19-31 (3)	Mojave fringe-toed lizard is a species of special concern. It is not listed under the CESA or FESA as suggested at the top of page 3.19-32. There is discussion here about impacts to Mojave fringe-toed lizard habitat that is inconsistent with the findings of Section 3.4. There is very little sand (which is required for fringe-toed lizard habitat) on the southern portion of the site. The material within the southern portion of the ROW is coarse-grained and gravelly. The	60-122

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	Mojave dune complex consists of fine grained sands. The discussion of sand transport and potential impacts to Mojave fringe-toed lizard should be revised in Section 3.19 for consistency with the discussion on page Section 3.4-10: "…the majority of the Project area is not suitable habitat for Mojave fringe-toed lizard due to the lack of fine, loose, windblown sand (Panorama Environmental, Inc., 2013a). Substrate in the Project ROW generally consists of rocky alluvial slopes and desert pavement separated by washes. A small area (5.82 acres) of suitable habitat was found at the southeast corner of the project area, south of the South Arrays"	60-122 cont.
3.19-34 (1), (5), (6)	The berms are located outside of the major drainage. Only very high flows (e.g., 100 year flood events) would reach the flood control berm. The berm is parallel to the flow path and would not redirect flows. The berm is parallel to the flow path and located outside of the flow path for smaller frequent storm events. It would only be used to prevent side channels from forming under large events (e.g., 100 year flooding).	60-123
3.19-35 (1)	The major washes would be avoided and sediment transport would not be substantially changed from existing conditions. Sediment transport was changed in the area as a result of I-15, which funnels flows through the southern portion of the Project area. Storm flows would not reach or be redirected by the berms except for under infrequent high flow conditions. Sediment transport functions occur on regular intervals during frequent events. The sand source for the dunes south of the Project site is aeolian and not fluvial. The dunes are not related to sediment transport on the Project site and would therefore not be affected by the minor modification to the drainage patterns for low-frequency, high flow events (100-year flooding). The I-15 highway construction involved a major change to the flow regime and sediment transport functions within the Project area; however, this major change did not affect sand recruitment at the dunes south of the Project because the Project area was never a source of sand. The soil material within the Project site is gravelly and coarse grained.	60-124
3.19-36 (1)	The drainage patterns were substantially altered by I-15. The Project proposal would maintain the existing drainage patterns and would not substantially alter them.	60-125
3.19-43 (Mitigation Measure 3.19-2)	Please add the following clause to the last sentence of the first paragraph of Mitigation Measure 3.19-2 …"with the overriding goal to prevent a net impact to downstream waterways from the alteration of on-site drainage or patterns and rates of erosion or sedimentation." Please delete "and County" from the first paragraph of Mitigation Measure 3.19-2 because the Project site is not subject to the land use jurisdiction of San Bernardino County. Mitigation Measure 3.19-2, item 3 discusses the active drainage channels in the Project area. Please define the term "active drainage channels" to reflect a standard flow regime such as the 2- or 5-year storm event.	60-126
3.19-43, 3.19-44 (Mitigation Measure 3.19-3)	The second and fifth paragraphs of Mitigation Measure 3.19.3 (Groundwater Monitoring and Mitigation Plan) refer to the identification of significance criteria and mitigation measures in the groundwater monitoring and mitigation plan. Please note that the DEIS/DEIR itself, in conjunction with the applicant's APMs, already identifies such significance criteria and mitigation measures. The primary purpose of the groundwater monitoring and mitigation plan is to implement those more general measures in detail. Therefore, please make the	60-127

Table A 1: Comments on Soda Mountain Solar PA/EIS/EIR		
Page (paragraph)	**Comment**	
	following conforming edits to mitigation measure 3.19-3: Page 3.19-44, first paragraph, lines 2 and 3: "…~~define~~ and specify implementation of the ~~significance criteria;~~ ~~and~~ ~~identify~~ groundwater mitigation measures and applicant proposed measures of the EIS/EIR~~in the event that adverse impacts occur that can be attributed to the Project~~." Page 3.19-44, fourth paragraph, lines 3 through 7: "The Plan shall specify the manner of implementation of the groundwater ~~describe~~ ~~additional~~ mitigation measures and applicant proposed measures of the EIS/EIR~~that may be implemented if the County and BLM determine that additional mitigation is required. S~~such as the procedures for~~additional measures could include~~ curtailing or, if necessary, ceasing withdrawal of groundwater and importing a corresponding amount of water from outside of the Soda Mountain Valley, ~~and shall be implemented~~ as agreed upon in the Plan and with the concurrence of the County and the BLM."	60-127 cont.
3.19-44; 3.19-45 (Mitigation Measure 3.19-4)	Page 3.19-45, please revise the second paragraph as follows: "If the results of the test indicate a significant drawdown in the aquifer that may affect the Mohave tui chub, water usage will be curtailed to a level that will not cause draw down in the aquifer that may affect the Mohave tui chub and supplemental water for dust suppression shall be provided by other means, such as hauling water from an off-site source." Page 3.19-45, third paragraph: Please revise the second sentence in this paragraph to read "groundwater elevations in the aquifer adjacent to Soda Springs and Lake Tuendae and water surface elevations in Soda Springs and Lake Tuendae." It is impractical to measure groundwater elevations within the Lake. Lake Tuendae is a manmade lake and water surface elevations within Lake Tuendae are not representative of groundwater elevations. Please revise the last sentence of in this paragraph as follows: "If the Project is shown to cause a significant decline in groundwater levels which could threaten the tui chub, then the Project shall correspondingly curtail withdrawal of groundwater, and an evaluation will be conducted to determine the cause and the ground water model revised."	60-128
3.19-45 (4)	Mitigation Measure 3.19-5 discusses flood protection during the construction period. Please clarify the measure by revising the first sentence of the mitigation measure as follows: "The Applicant shall ensure that during construction, temporary construction-related structures constructed within a 100 year floodplain, such as roads, berms, and other facilities, would be constructed so as to avoid substantial interference with 100-year flood flows to the extent feasible." Please also add a "to the extent feasible" qualifier to the first clause of the second sentence of the mitigation measure.	60-129
3.21-9 (8)	Para. 8, Line 4: Please update the statement of number of significant and unavoidable impacts.	60-130
3.21-10 (4), (5)	Para 4, Line 5: Revise to read: "in which the Project could have a cumulatively considerable construction-related contribution to a significant..." Para 5, Line 5: There is no "Population and Housing" chapter; it falls under Socioeconomics and Environmental Justice.	60-131

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Page (paragraph)	**Comment**	
	Para. 5, Line 6: Please add Visual Resources.	60-131 cont.
3.21-11	Para. 1, Line 2: Add: "and Air-3," Para. 2, Line 3: Wild-7 should be removed from this list because it is less than significant.	60-132

Correspondence of Soda Mountain Solar APMs to PA/DEIS/DEIR Mitigation Measures	
APM	
Air Resources	
APM 1 The Applicant shall use periodic watering for short-term stabilization of disturbed areas to minimize visible fugitive dust emissions. Use of a water truck to maintain surface moisture on disturbed areas and surface application of water during visible dusting episodes shall be considered sufficient to maintain compliance.	**Mitigation Measure 3.2-1** The Applicant shall apply water twice daily to all unpaved roads and unpaved parking areas actively used during operation and maintenance, except when moisture remains in the soils such that dust is not produced when driving on unpaved roads.
Vegetation Resources	
APM 35: Preconstruction Surveys for Rare or Special-status Plant Species and Cacti. Before construction of a given phase begins, the Applicant will stake and flag the construction area boundaries, including the construction areas for the solar arrays and associated infrastructure; construction laydown, parking, and work areas; and the boundaries of all temporary and permanent access roads. A BLM-approved biologist will then survey all areas of proposed ground disturbance for rare or special-status plant species and cacti during the appropriate period (blooming or otherwise identifiable) for those species having the potential to occur in the construction areas. All rare or special-status plant species and cacti observed will be flagged for transplantation. **APM 36: Vegetation Resources Management Plan**. The Applicant will prepare and implement a Vegetation Resources Management Plan that contains the following components: • Vegetation salvage plans that discuss the methods that will be used to transplant cacti present within the proposed disturbance areas following BLM's standard operating procedures, as well as methods that will be used to transplant special-status plant species that occur within proposed disturbance areas. • Restoration plans discussing the methods that will be used to restore any of the four native plant community types (creosote bush-white bursage scrub, cheesebush scrub, creosote bush	**Mitigation Measure 3.3-2 Vegetation Best Management Practices.** The Applicant shall undertake the following measures to manage the construction site and related facilities in a manner to avoid or minimize impacts to vegetation resources: 1. *Limit Area of Disturbance*. The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities in consultation with the Designated Biologist. Spoils and topsoil shall be stockpiled in disturbed areas lacking native vegetation and which do not provide habitat for special-status species. Parking areas, staging and disposal site locations shall similarly be located in areas without native vegetation or special-status species habitat. All disturbances, Project vehicles and equipment shall be confined to the flagged areas. 2. *Minimize Road Impacts*. New and existing roads that are planned for construction, widening, or other improvements shall not extend beyond the flagged impact area as described above. All vehicles passing or turning around would do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads or the construction zone, the route shall be clearly marked (i.e., flagged and/or staked) prior to the onset of construction.

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scrub, and smoke tree woodland) present within the project right-of-way that may be temporarily disturbed by construction activities. Vegetation salvage and restoration plans that will specify success criteria and performance standards. The Applicant will be responsible for implementing the VRMP according to BLM requirements. **APM 50: Integrated Weed Management Plan**. The Applicant will implement an Integrated Weed Management Plan to control weed infestations and the spread of noxious weeds on the project site.	3. *Minimize Traffic Impacts*. Vehicular traffic during Project construction and operation shall be confined to existing routes of travel to and from the Project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. 4. *Monitor During Construction*. In areas that have not been fenced with desert tortoise exclusion fencing and cleared, a Designated Biologist shall be present at the construction site during all Project activities that have potential to disturb soil, vegetation, and wildlife. The Designated Biologist or Biological Monitor shall review areas immediately ahead of equipment during brushing and grading activities. 5. *Minimize Impacts of Staging Areas*. Staging areas for construction on the plant site shall be within the area that has been fenced with desert tortoise exclusion fencing. For construction activities outside of the solar plant site, access roads, pulling sites, and storage and parking areas shall be designed, utilized, and maintained with the goal of minimizing impacts to native plant communities and sensitive biological resources. 6. *Avoid Use of Toxic Substances*. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to plants and wildlife. 7. *Implement Erosion Control Measures*. Standard erosion control measures shall be implemented for all phases of construction and operation where sediment run-off from exposed slopes threatens to enter "waters of the State". Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into drainages. All disturbed soils and roads within the Project site shall be stabilized to reduce erosion potential, both during and following construction. Areas of disturbed soils (access and staging areas) with slopes toward a drainage shall be stabilized to reduce erosion potential. To avoid impacts associated with generation of fugitive dust, surface application of water would be employed during construction and operation and maintenance activities.

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	8. *Monitor Ground Disturbing Activities Prior to Pre-Construction Site Mobilization*. If pre-construction site mobilization requires ground-disturbing activities such as for geotechnical borings or hazardous waste evaluations, a Designated Biologist or Biological Monitor shall be present to monitor any actions that could disturb soil, vegetation, or wildlife. 9. *Revegetation of Temporarily Disturbed Areas*. The Applicant shall prepare and implement a Revegetation Plan to restore all areas subject to temporary disturbance to pre-Project grade and conditions. Temporarily disturbed areas within the Project site include, but are not limited to: all proposed locations for linear facilities, temporary access roads, berms, areas surrounding the drainage diffusers, construction work temporary lay-down areas not converted to part of the solar field, and construction equipment staging areas. The Revegetation Plan shall include a description of topsoil salvage and seeding techniques and a monitoring and reporting plan, and the following performance standards by the end of monitoring year 2: a. at least 80 percent of the species observed within the temporarily disturbed areas shall be native species that naturally occur in desert scrub habitats; and b. relative cover and density of plant species within the temporarily disturbed areas shall equal at least 60 percent. 10. *Integrated Weed Management Plan.* This measure provides further detail and clarifies requirements for the Applicant's draft Integrated Weed Management Plan (IWMP) (see Appendix E-2). Prior to beginning construction on the Project, the Applicant shall prepare, circulate to the BLM for comment and approval, and then implement an IWMP that meets the approval of BLM's Authorized Officer and conforms to the CDCA Plan (Table 1) to prevent the spread of existing invasive species and the introduction of new invasive species to the Project site. The Plan shall be consistent with BLM's Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States (BLM, 2007) and the National Invasive Species

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	Management Plan (National Invasive Species Council, 2008). The IWMP shall include, at a minimum: specific management objectives and measures for each target invasive species; baseline conditions; weed risk assessment; measures (both preventative and containment/control) to prevent/limit the introduction and spread of invasive species; monitoring and surveying methods; and reporting requirements. The BLM-approved IWMP shall include: a. Preventative measures to prevent the spread of weeds into new habitats, such as equipment inspections, use of weed-free erosion control materials and soils, and a mandatory site training element that includes weed management; b. Weed containment and control measures such as the removal of invasive species primarily via mechanical means, with the use of herbicides restricted to BLM-policies and approved usage (e.g., BLM's *Herbicide Use Standard Operating Procedures* provided in Appendix B of the Record of Decision for the *Final Vegetation Treatments Using Herbicides Programmatic Environmental Impact Statement* (BLM, 2007); c. Monitoring and reporting standards annually during construction and for three years following the completion of construction to describe trend in weed distribution and direct weed management measures, and; d. Reporting of monitoring and management efforts in annual reports and a final monitoring report completed at the end of three years of post-construction monitoring. Copies of these reports will be provided to the BLM for review and comment. The BLM will use the results of these reports to determine if any additional monitoring or control measures are necessary. Weed control will be ongoing on the Project site for the life of the Project, but plan success will be determined by the BLM after the three years of operations monitoring through the reporting and review process. Success criteria will be defined as having no more than 10 percent increase

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APM	**Mitigation Measure**
	in a weed species or in overall weed cover in any part of the Project site.
APM 37: Mitigate Direct Impacts to Rare or Special-status Plants. To the extent feasible, the project will be designed to avoid impacts to the Emory's crucifixion-thorn population within the project ROW. No construction shall be allowed within a 100-foot buffer area around the Emory's crucifixion-thorn population. All other California Rare Plant Rank (CRPR) 1 and 2 plant occurrences within the Project ROW will be documented during preconstruction surveys. The Applicant will also provide a 100-foot buffer area surrounding each avoided occurrence, in which no construction activities will take place, if feasible. If avoidance is not feasible, the Applicant will provide on-site mitigation (e.g., vegetation salvage) for impacts to rare plants. **APM 38:** Herbicides shall not be applied systemically over the entire project area. Herbicides shall be applied in focused treatments in areas of identified invasive weed infestations, such as where there is a clump or monotypic stand of invasive weeds. Herbicides shall not be applied within 100 feet of a special-status plant. **APM 40:** Herbicides shall not be applied during rain events, or within 48 hours of a forecast rain event with a 50 percent or greater chance of precipitation. **APM 36: Vegetation Resources Management Plan**. The Applicant will prepare and implement a Vegetation Resources Management Plan that contains the following components: • Vegetation salvage plans that discuss the methods that will be used to transplant cacti present within the proposed disturbance areas following BLM's standard operating procedures, as well as methods that will be used to transplant special-status plant species that occur within proposed disturbance areas. • Restoration plans discussing the methods that will be used to restore any of the four native plant community types (creosote bush-white bursage scrub, cheesebush scrub, creosote bush	**Mitigation Measure 3.3-3: Special-Status Plant Species and Cacti Impact Avoidance and Minimization.** This measure will avoid unintended impacts to special-status plants on the Project site (i.e., Emory's crucifixion thorn) and provide for the salvage of protected cacti prior to construction. This measure includes the following requirements: 1. The Applicant shall establish Environmental Exclusion Areas (EEAs) around Emory's crucifixion thorn plants that have been identified on the Project site (Figure 3.3-3). A minimum 100-foot exclusion area shall be established around the plants, which shall be clearly identified and maintained throughout construction to ensure that avoided plants are not inadvertently harmed. EEAs shall be clearly delineated in the field with temporary construction fencing and signs prohibiting movement of the fencing or sediment controls under penalty of work stoppages or compensatory mitigation. 2. *Worker Environmental Awareness Program (WEAP)*. The WEAP (APM 44; Mitigation Measure 3.4-1c) shall include training components specific to protection of special-status plants that occur on the Project site. 3. *Herbicide and Soil Stabilizer Drift Control Measures*. Special-status plant occurrences within 100 feet of the Project Disturbance Area, including Utah vine milkweed, shall be protected from herbicide and soil stabilizer drift. The IWMP (APM 50 and Mitigation Measure 3.3-2) includes measures to avoid chemical drift or residual toxicity to special-status plants consistent with guidelines such as those provided by the Nature Conservancy's The Global Invasive Species Team (Hillmer and Liedtke, 2003), the USEPA, and the Pesticide Action Network Database (available at: http://www.pesticideinfo.org). *Erosion and Sediment Control Measures*. Erosion and sediment control measures shall not inadvertently impact special-status plants (e.g., by using invasive or

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scrub, and smoke tree woodland) present within the project right-of-way that may be temporarily disturbed by construction activities. Vegetation salvage and restoration plans that will specify success criteria and performance standards. The Applicant will be responsible for implementing the VRMP according to BLM requirements.	non-Mojave Desert native plants in seed mixes, introducing pest plants through contaminated seed or straw, etc.). These measures shall be incorporated in the Comprehensive Drainage, Erosion, and Sedimentation Control Plan (Mitigation Measure 3.19-2). 4. *Preconstruction Cacti Salvage*. The Applicant shall develop a *Vegetation Resources Management Plan* that details the methods for the salvage and transplantation of target succulent species that would be affected by the Project. The Plan shall be submitted to the BLM AO for review and approval and shall include at a minimum the following elements: a. The location of target plants on the Project site; b. Criteria for determining which individual plants are appropriate for salvage; c. The proposed methods for salvage, propagation, transport, and planting; d. Procedures for identifying target species during preconstruction clearance surveys; e. Considerations for storing salvaged plants or pre-planting requirements; f. Suggested transplantation sites; g. A requirement for 10 years of maintenance of the transplanted individuals, including removal of invasive species and irrigation (if necessary); and h. A requirement for 10 years of monitoring to determine the percentage of surviving plants each year and to adjust maintenance activities using an adaptive management approach.
Water Resources	
APM 17. The groundwater model will be recalibrated using the measured aquifer properties resulting from the 72-hour aquifer test (see APM 14, above). If the results of the recalibrated model indicate that reduction in	**Mitigation Measure 3.19-3: Groundwater Monitoring and Mitigation Plan.** A Groundwater Monitoring and Mitigation Plan (Plan) shall be prepared, reviewed, and approved by San Bernardino County prior

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outflow from the valley would be less than 50 AFY under proposed project conditions, then no further action will be taken. If the recalibrated model predicts reduced outflow from the northeast outlet of the Soda Mountain Valley (the Valley) in excess of 50 AFY, APM 18 will be implemented. **APM 18.** If, as described in APM 17, the recalibrated model predicts outflow from the northeast outlet of the Valley reduced by an amount in excess of 50 AFY, the Applicant will hire a professional hydrogeologist or geologist to develop a groundwater monitoring plan for submittal to and acceptance of BLM and San Bernardino County. The groundwater monitoring plan would include monitoring and quarterly reporting of groundwater levels within the Valley, in the alluvial aquifer adjacent to Soda Spring and west of Soda Lake, and at Soda Spring during construction of the project. If the project is shown to cause a decline in groundwater levels of 5 feet or more in the alluvial aquifer near Soda Spring, or there is a decrease in groundwater discharge at Soda Spring as a result of project groundwater withdrawal that results in the water level in the spring decreasing to less than 4 feet deep, which would threaten the tui chub [see Section 3.4: Biological Resources – Wildlife], an evaluation would be conducted to determine if the project is causing reduced groundwater discharge at Soda Spring. If it is determined that the project has caused a decrease in the volume of groundwater discharged at Soda Spring such that the spring is less than 4 feet deep, thereby threatening the tui chub habitat, then the project shall correspondingly curtail withdrawal of groundwater and import a corresponding amount of water from outside of the Valley. Groundwater level measurements in the monitoring wells located in the Valley would be compared to the model predictions on an annual basis during construction and every 5 years during project operation. The groundwater model would be recalibrated if the measured drawdown values in the monitoring wells exceed the predicted values by more than	to Project approval and implementation. The County must approve the Plan prior to issuance of a groundwater well permit. The Plan shall conform to the guidelines for groundwater monitoring as detailed by San Bernardino County in the "*Guidelines for Preparation of a Groundwater Monitoring Plan*" (Guidelines) (San Bernardino County, 2000). The Plan shall be prepared by a qualified professional geologist, hydrogeologist, or civil engineer registered in the State of California and submitted by the Applicant to the County and the BLM for approval. This Plan shall provide detailed methodology for monitoring and reporting procedures; locate monitoring, extraction and survey points; define significance criteria; and identify mitigation measures in the event that adverse impacts occur that can be attributed to the Project. The Plan shall include summarization of all monitoring data and would require submission of annual reports to the County. A comprehensive summary and analysis of data shall be included in a 5-year report. Monitoring shall be performed during pre-construction, construction, and operation of the Project, with the intent to establish pre-construction and Project-related groundwater level trends that can be quantitatively compared against observed and simulated trends near the Project pumping wells and near potentially affected existing private wells and sensitive water resources, such as Soda Spring at Zzyzx. The County will determine the duration of monitoring and reporting periods based on project conditions and monitoring data. Additionally, at each stage of reporting, the Applicant would be required to re-evaluate of the adequacy of the monitoring network and Plan. The Plan shall include a schedule consistent with the Guidelines for submittal of data reports by the Applicant to the County and the BLM, for the duration of the monitoring period. These data reports shall be prepared and submitted to the County and the BLM for review and approval, and shall include water level monitoring data (trend analyses) from all pumping and monitoring wells. Annual data reports shall be prepared and submitted to the County and the BLM for review and approval. The annual reports must be prepared

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15 percent. Monitoring would cease after 5 years of operational monitoring if two conditions are met: • The monitoring data support the model predictions. The model predicts the reduction in outflow from the northeast outlet will be less than 50 AFY under proposed project conditions, as detailed in APM 17.	consistent with County Guidelines and contain all necessary information and data summaries. The fifth annual report must be submitted to the County in the form of a revised Hydrogeology Report. Along with the components of the annual reports, the 5-year report shall include a re-evaluation of the hydrology of the project area based upon the monitoring data and any other information available. The 5-year report shall be prepared consistent with approved county Guidelines and submitted to the County and the BLM for review and approval. The County and the BLM shall determine whether operating groundwater supply wells or other water resources, such as Soda Spring, surrounding the Project site are influenced by Project activities. The Plan shall describe additional mitigation measures that may be implemented if the County and the BLM determine that additional mitigation is required. Such additional measures could include curtailing or, if necessary, ceasing withdrawal of groundwater and importing a corresponding amount of water from outside of the Soda Mountain Valley, and shall be implemented as agreed upon in the Plan and with the concurrence of the County and the BLM. After the first 5 years of the Project, the Applicant and the County and the BLM shall jointly evaluate the effectiveness of the Groundwater Monitoring and Mitigation Plan and determine if monitoring frequencies or procedures should be revised or eliminated.
Wildlife Resources	
APM 47. A qualified biologist will monitor active bird nests or burrows that are located in or adjacent to work areas during the avian breeding season until nesting activities are complete. Nest monitoring results will be recorded in a Nest Check Form. Typically a nest check will have a minimum duration of 30 minutes, but may be longer or shorter, or more frequent than one check per day, as determined by the projects's Designated Biologist [see Mitigation Measure 3.3-1 in Section 3.3, *Biological Resources – Vegetation*] based	**Mitigation Measure 3.4-1b: Biological Monitoring during Construction.** Biological Monitor(s) shall be employed to assist the Designated Biologist in conducting pre-construction surveys and monitoring ground disturbance, grading, construction, operation and maintenance, decommissioning, and restoration activities. The Biological Monitor(s) shall have sufficient education and field experience to understand resident wildlife species biology, have experience conducting desert tortoise, burrowing owl, kit fox, and

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on the type of construction activity (duration, equipment being used, potential for construction-related disturbance) and other factors related to assessment of nest disturbance (weather variations, pair behavior, nest stage, nest type, species, etc.). The Designated Biologist will record the construction activity occurring at the time of the nest check and note any work exclusion buffer in effect at the time of the nest check. Non-project activities in the area should also be recorded (e.g., adjacent construction sites, roads, commercial/industrial activities, recreational use, etc.). The Designated Biologist will record any sign of disturbance to the active nest, including but not limited to parental alarm calls, agitated behavior, distraction displays, nest fleeing and returning, chicks falling out of the nest or chicks or eggs being predated as a result of parental abandonment of the nest. Should the Designated Biologist determine project activities are causing or contributing to nest disturbance that might lead to nest failure, the Designated Biologist will coordinate with the Construction Manager to limit the duration or location of work, and/or set other limits related to use of project vehicles, and/or heavy equipment. Nest locations, project activities in the vicinity of nests, and any adjustments to buffer areas will be described and reported in regular monitoring and compliance reports. **APM 55.** The Applicant will clear vegetation outside of the bird breeding season to the maximum extent practicable. Preconstruction avian clearance surveys will be conducted by a qualified biologist for vegetation clearing during the bird breeding season (February 1 through August 31). If a nest(s) is identified in the preconstruction avian clearance surveys, a qualified monitor will be on site during vegetation removal in order to enforce non-disturbance buffers and stop activities as necessary should construction disturb nesting activity.	badger field monitoring, and be able to identify these species and their sign (including active burrows). The Designated Biologist shall submit a resume, at least three (3) references, and contact information for each prospective Biological Monitor to the BLM, and the Wildlife Agencies for approval. To avoid and minimize effects to biological resources, the Biological Monitor(s) will assist the Designated Biologist with the following: 1. Be present during construction activities that take place in suitable habitat for desert tortoise, burrowing owl, kit fox, badger, or other protected species to prevent or minimize harm or injury to these species. 2. Activities of the Biological Monitor(s) include, but are not limited to, ensuring compliance with all avoidance and minimization measures; monitoring for desert tortoise, burrowing owl, kit fox, badger, and other protected species; halting construction activity in the area if an individual is found; and checking the staking/flagging of all disturbance areas to be sure that they are intact and that all construction activities are being kept within the staked/flagged limits. If a desert tortoise, burrowing owl, kit fox, badger, or other protected species is found within a work area, the Biological Monitor(s) shall immediately notify the Designated Biologist, who shall determine measures to be taken to ensure that the individual is not harmed. 3. Inspect the Project area for any special-status wildlife species. 4. Ensure that potential habitats within the construction zone are not occupied by special-status species (e.g., potential burrows or nests are inspected). 5. In the event of the discovery of a non-listed, special-status ground-dwelling animal, recover and relocate the animal to adjacent suitable habitat at least 200 feet from the limits of construction activities. 6. At the end of each work day, inspect all potential wildlife pitfalls (e.g., trenches, bores, other excavations) for wildlife and remove

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	wildlife as necessary. If the potential pitfalls will not be immediately backfilled following inspection, the Biological Monitor(s) will ensure that the construction crew slopes the ends of the excavation (3:1 slope) to provide wildlife escape ramps or will ensure that the construction crew completely and securely covers the excavation to prevent wildlife entry. 7. Inspect the site to help ensure trash and food-related waste is place in closed-lid containers and to ensure that workers do not feed wildlife. Also inspect the work area each day to ensure that no microtrash (e.g., bolts, screws, etc.) is left behind.
APM 44. The Applicant will implement a Worker Environmental Awareness Program (WEAP) to educate workers about the environmental issues associated with the project and the mitigation measures that will be implemented at the site, including nest awareness and non-disturbance exclusion zones.	**Mitigation Measure 3.4-1c: Worker Environmental Awareness Program (WEAP).** Prior to Project initiation, the Designated Biologist shall develop and implement the WEAP (APM 44), which shall be available in English and Spanish. Wallet-sized cards summarizing the information shall be provided to all construction and operation and maintenance personnel. The WEAP shall include the following: 1. An explanation of the sensitivity of the vegetation communities and special-status plant and wildlife species within and adjacent to work areas, and proper identification of these resources. 2. Biology and status of the desert tortoise, golden eagle, burrowing owl, other nesting birds, kit fox, and American badger and measures to reduce potential effects to these species. 3. Actions and reporting procedures to be used if desert tortoise, burrowing owl, other nesting birds, kit fox, or American badger are encountered. 4. An explanation of the function of flagging that designates authorized work areas. 5. Driving procedures and techniques to reduce mortality of wildlife on roads. 6. Discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act

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	and the consequences of non-compliance with these acts. 7. The importance of avoiding the introduction of invasive weeds into the Project area and surrounding areas. 8. A discussion of general safety protocols such as hazardous substance spill prevention and containment measures and fire prevention and protection measures. 9. A review of mitigation requirements.
APM 7. The Applicant shall limit the speed of vehicles traveling on unpaved roads and disturbed areas to 15 miles per hour. **APM 62.** Project personnel and visitors will be instructed to drive at low speeds (<15 mph) and be alert for wildlife, especially in low-visibility conditions.	**Mitigation Measure 3.4-1d: Speed Limits.** Speed limits along all access roads outside of permanent desert tortoise fencing shall not exceed 15 miles per hour to minimize dust during construction activities. Speed limits within permanent desert tortoise fencing shall not exceed 25 miles per hour to minimize impacts during operations and maintenance. Nighttime vehicle traffic associated with Project activities shall be kept to a minimum volume and speed to prevent mortality of nocturnal wildlife species.
APM 43. Lighting on the project site shall be dark sky-compliant. Lighting shall be limited to areas required for operations or safety, directed on site to avoid backscatter, and shielded from public view to the extent practical. Lighting that is not required during nighttime hours shall be controlled with sensors or switches operated such that lighting will be on only when needed. **APM 61.** The project will minimize the use of lighting that could attract migrating birds and bats (that feed on concentrations of insects at lights). Lighting will be kept to the minimum level necessary for safety and security. High intensity, steady burning, bright lights such as sodium vapor or spotlights will not be used on project facilities.	**Mitigation Measure 3.4-1e: Lighting Specifications to Minimize Bird and Bat Impacts.** The Applicant/Owner shall minimize night lighting during construction by using shielded directional lighting that is pointed downward, thereby avoiding illumination to adjacent natural areas and the night sky. As a component of the lighting plan required in Mitigation Measure 3.18-1, all exterior lighting at operation and maintenance facilities, substations, and appurtenant structures shall be of the lowest illumination required for security and human safety. The Applicant/Owner shall install and continuously use and maintain lights with motion or heat sensors and switches to keep lights off when not required. Light fixtures shall be fully shielded and directed downward to minimize illumination above the horizontal plane. The Applicant/Owner shall minimize use of high-intensity lighting and steady-burning or bright lights such as sodium vapor, quartz, halogen, or other bright spotlights.

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APM 46. Pre-construction clearance surveys to identify active bird nests will be conducted within 2 weeks of ground disturbance or vegetation removal in all active work areas during the breeding season (February 1 through August 31). The work area will need to be resurveyed following periods of inactivity of 2 weeks or more. Active nests will be avoided using non-disturbance buffer zones as shown below.

Table 4.4-1: Avian Awareness and Baseline Non-Disturbance Buffer Zones

Type	Starting Distance of Awareness or Non-Disturbance Exclusion Zones	Implementation Notes
Passerines	300 feet from active nest	A qualified biologist may reduce or increase the buffer distance if there is sufficient evidence based on species, habitat, and other factors, that the Applicant activity would not impact nesting activity. Buffers would be maintained until a qualified biologist has determined that the nest is no longer active.
Raptors	500 feet from active nest	
Golden Eagles	1 mile and line of sight from active nest	
Burrowing Owls1	250 feet from active burrows during nesting season (February 1 through August 31)	

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Mitigation Measure 3.4-1f: Burrowing Owl Protection Measures. No more than 30 days prior to the start of construction, a pre-construction survey for burrowing owls in conformance with the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFG, 2012) shall be completed within suitable habitat at every work area and within a 150-meter buffer zone of each work area. The Applicant/Owner shall submit the results of the pre-construction survey to BLM's Authorized Officer and CDFW. The Applicant/Owner shall also submit evidence of conformance with federal and state regulations regarding the protection of the burrowing owl by demonstrating compliance with the following:

1. Unless otherwise authorized by BLM and CDFW, no disturbance shall occur within 160 feet (50 meters) of occupied burrows during the non-breeding season (September 1 through January 31) or within 650 feet (500 meters) during the breeding season (February 1 through August 31).

2. Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31). In the event that an occupied burrow absolutely cannot be avoided (e.g., due to physical or safety constraints), passive relocation of owls may be implemented prior to construction activities only if a qualified biologist approved by BLM verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Eviction outside the nesting season may be permitted pending evaluation of eviction plans (developed in accordance with BLM protocol for burrowing owls) by CDFW and receipt of formal written approval from BLM authorizing the eviction. A Burrowing Owl Mitigation and Monitoring Plan shall be submitted to the BLM's Authorized Officer and CDFW for review and approval prior to passive relocation.

3. Unless otherwise authorized by BLM, a 650-foot buffer within which no activity will be permissible will be maintained between Project activities and nesting burrowing owls during the nesting season. This

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<table><tr><td></td><td>160 feet from active burrows during the wintering period (September 1 through January 31)</td><td></td></tr><tr><td>1</td><td colspan="2">Described in CBOC 1993</td></tr></table> **APM 57.** Surveys for burrowing owl will be conducted in suitable burrowing owl habitat prior to construction and if construction is suspended for 2 weeks or more. The survey protocol will follow the Burrowing Owl Consortium Guidelines (CBOC 1993). If active burrows are found they will be avoided using non-disturbance buffer zones, as described in the table included in APM 46. Passive relocation would be used as described above once the burrow is determined to be inactive.	protected area will remain in effect until August 31 or at BLM's discretion and based upon monitoring evidence, until the young owls are foraging independently. 4. If accidental take (disturbance, injury, or death of owls) occurs, the Designated Biologist will be notified immediately. 5. Impacts to active burrowing owl territories shall be mitigated at a 1:1 ratio through a combination of off-site habitat compensation and/or off-site restoration of disturbed habitat capable of supporting this species. The acquisition of occupied habitat off-site shall be in an area where turbines would not pose a mortality risk. Acquisition of habitat shall be consistent with the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFG, 2012). The preserved habitat shall be occupied by burrowing owl and shall be of superior or similar habitat quality to the impacted areas in terms of soil features, extent of disturbance, habitat structure, and dominant species composition, as determined by a qualified ornithologist. The site shall be approved by BLM. Land shall be purchased and/or placed in a conservation easement in perpetuity and managed to maintain suitable habitat. The off-site area to be preserved can coincide with off-site mitigation lands for permanent impacts to sensitive
APM 66. Desert tortoise exclusion fencing will be installed at the perimeter of project construction areas (i.e., solar array areas, project buildings, substation/switchyard, earthen berms, and along the edge of access roads and collector line corridors). The fence locations will be determined during final design and will enclose areas of project activity. The fenceline and a 30-foot-wide buffer will be surveyed for desert tortoise before construction of the fence and according to USFWS protocol. Tortoises found in the fenceline survey area or spotted within 50 meters of the fenceline survey area will be: • Assigned a USFWS identification number. • Given a health assessment • Fitted with a transmitter. Tortoises that are too small to accept a transmitter (i.e., no transmitter is available that is 10 percent or less	**Mitigation Measure 3.4-2a: Desert Tortoise Protection.** The Applicant/Owner shall undertake appropriate measures to manage the construction site and related facilities in a manner to avoid or minimize impacts to desert tortoise. Methods for clearance surveys, fence specification and installation, tortoise handling, artificial burrow construction, egg handling, and other procedures shall be consistent with those described in the USFWS' 2009 *Desert Tortoise Field Manual* (USFWS, 2009d) or more current guidance provided by CDFW and USFWS. The Applicant/Owner shall also implement all terms and conditions described in the Biological Opinion to be prepared by USFWS. These measures include, but are not limited to, the following: 1. ***Desert Tortoise Fencing along I-15.*** If required by the USFWS, to

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of the tortoise's body weight) will be treated as a translocatee and held in situ. • Moved into habitat adjacent to and outside the fenceline. The tortoise will be moved into an empty burrow if clearance of the fence area takes place outside the tortoise active season (i.e., from November to March and from June to August). Any of the moved tortoises that return to the project site before completion of fence construction will be treated as a translocatee. Desert tortoises remaining outside the fenceline prior to completion of the fence will be deemed residents. The transmitter will be removed from the resident tortoise, and no further action will be taken for the resident tortoises. In all situations USFWS procedures will be followed to clear and handle the desert tortoises. **APM 67.** The desert tortoise preconstruction clearance survey will be conducted during the desert tortoise active season (April through May and September through October) unless otherwise agreed to by USFWS and CDFW. The survey will be conducted according to USFWS protocol and preferably during early morning hours to increase the chance of locating juvenile tortoises, per the USFWS Guidelines. Any tortoise scat will be collected on each pass of a transect, per the USFWS Guidelines. **APM 68.** The linear facilities preconstruction clearance survey(s) will be conducted at any time throughout the year. Linear facilities for this project will include the buried collector lines between arrays and connecting to the substation. Located desert tortoises will be undisturbed and allowed to clear the site without assistance or interference. Tortoises will be moved if necessary to reduce the potential for harm from construction activities, but will not be moved more than 500 meters in such a scenario. USFWS procedures will be followed to clear and handle the desert tortoise. **APM 69.** Data will be collected during clearance surveys as described in this section. The same data will be collected again on tortoises held in the interim in situ on the day that the tortoise is translocated from the project site. The data will include:	avoid increases in vehicle-related mortality from disruption of local movement patterns along the existing ephemeral wash systems, desert tortoise-proof fencing shall be installed along the existing freeway right-of-way fencing on both sides of I-15 for the entire east-west dimension of the Project site. The tortoise fencing shall be designed to direct tortoises to existing undercrossing to provide safe passage under the freeway, and shall be regularly inspected and maintained for the life of the Project. 2. ***Desert Tortoise Exclusion Fence Installation.*** To avoid impacts to desert tortoises, permanent desert tortoise exclusion fencing shall be installed along the permanent perimeter security fence and temporarily installed along road corridors during construction. The proposed alignments for the permanent perimeter fence and temporary fencing shall be flagged and surveyed within 24 hours prior to the initiation of fence construction. Clearance surveys of the perimeter fence and temporary fencing areas shall be conducted by the Designated Biologist(s) using techniques outlined in the USFWS' 2009 Desert Tortoise Field Manual and may be conducted in any season with USFWS and CDFW approval. Biological Monitors may assist the Designated Biologist under his or her supervision. These fence clearance surveys shall provide 100 percent coverage of all areas to be disturbed and an additional transect along both sides of the fence line covering an area approximately 90 feet wide centered on the fence alignment. Transects shall be no greater than 15 feet apart. All desert tortoise burrows and burrows constructed by other species that might be used by desert tortoises shall be examined to assess occupancy of each burrow by desert tortoises and handled in accordance with the USFWS' 2009 *Desert Tortoise Field Manual*. Any desert tortoise located during fence clearance surveys shall be handled by the Designated Biologist in accordance with the USFWS' 2009 *Desert Tortoise Field Manual* (USFWS, 2009d). a. *Timing, Supervision of Fence Installation*. The exclusion fencing shall be installed prior to the onset of site clearing and grubbing. The fence installation shall be supervised by the Designated Biologist and monitored by the Biological Monitors to ensure the safety of any

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• Date • Time • Temperature (°C) • Project Name • Site type (project/recipient/control) • Landowner (BLM) • Permit/BO # • Coverage # • Field crew vendor • Surveyor (first and last name) • ID# • MCL (mm) • Sex • UTM (Easting) • UTM (Northing • Location (e.g., burrow) • Transmitter manufacturer • Transmitter serial # • Transmitter frequency • Transmitter install date • Battery life (months) • Status (alive/dead/lost) **APM 70.** Following installation of the desert tortoise exclusion fencing, the fencing shall be regularly inspected. Permanent fencing shall be inspected monthly and during and within 24 hours following all major rainfall events and all federal holidays. A major rainfall event is defined as one for which flow is detectable within the fenced drainage. During construction, repairs to fencing will be completed within 24 hours of detecting a breach. During operation, any damage to the fencing shall be temporarily repaired immediately to keep tortoises out of the site, and permanently repaired within 72 hours between March 15 and October 31 and within 7 days between November 1 and March 14 of observing damage. Inspection reports will be submitted to BLM within 48	tortoise present. b. *Fence Material and Installation*. The permanent tortoise exclusionary fencing shall be constructed in accordance with the USFWS' 2009 *Desert Tortoise Field Manual* (Chapter 8 – Desert Tortoise Exclusion Fence). c. *Security Gates*. Security gates shall be designed with minimal ground clearance to deter ingress by tortoises. The gates may be electronically activated to open and close immediately after the vehicle(s) have entered or exited to prevent the gates from being kept open for long periods of time. Cattle grating designed to safely exclude desert tortoise shall be installed at the gated entries to discourage tortoises from gaining entry d. *Fence Inspections*. Following installation of the desert tortoise exclusion fencing for both the permanent site fencing and temporary fencing in the utility corridors, the fencing shall be regularly inspected. If tortoise were moved out of harm's way during fence construction, permanent and temporary fencing shall be inspected at least two times a day for the first 7 days to ensure a recently moved tortoise has not been trapped within the fence. Thereafter, permanent fencing shall be inspected monthly and during and within 24 hours following all major rainfall events. A major rainfall event is defined as one for which flow is detectable within the fenced drainage. Any damage to the fencing shall be temporarily repaired immediately to keep tortoises out of the site, and permanently repaired within 48 hours of observing damage. Inspections of permanent site fencing shall occur for the life of the Project. Temporary fencing shall be inspected weekly and, where drainages intersect the fencing, during and within 24 hours following major rainfall events. All temporary fencing shall be repaired immediately upon discovery and, if the fence may have permitted tortoise entry while damaged, the Designated Biologist shall inspect the area for tortoise. 3. ***Desert Tortoise Clearance Surveys within Solar Arrays.*** Clearance surveys shall be conducted in accordance with the USFWS *Desert*

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hours of any inspection. **APM 71.** No construction, operations, or decommissioning activities shall occur in unfenced areas without a USFWS-approved desert tortoise biologist present. These activities include the construction phase (construction, revegetation), decommissioning phase, and maintenance activities during the operations phase that require new surface disturbance. An adequate number of trained and experienced monitors must be present during all construction and decommissioning activities in unfenced areas, depending on the various construction tasks, locations, and season. A biologist shall be on site from March 15 through October 31 (active season) during ground-disturbing activities in areas outside the exclusion fencing, and shall be on-call from November 1 to March 14 (inactive season). The biologist shall check all construction areas immediately before construction activities begin. The biologist shall inspect construction pipes, culverts, or similar structures: (a) with a diameter greater than 3 inches, (b) stored for one or more nights, (c) less than 8 inches aboveground, and (d) within desert tortoise habitat (i.e., outside the permanently fenced area), before the materials are moved, buried, or capped. Alternatively, such materials may be capped before storing outside the fenced area or placing on pipe racks. **APM 73.** Compensatory habitat mitigation shall be provided at a 1:1 ratio for impacts to suitable desert tortoise habitat during construction. A habitat compensation plan will be prepared to the approval of CDFW, USFWS, and BLM.	*Tortoise Field Manual* (USFWS, 2009d) (Chapter 6 – Clearance Survey Protocol for the Desert Tortoise – Mojave Population) and shall consist of two surveys covering 100 percent the Project area by walking transects no more than 15 feet apart. If a desert tortoise is located during the second survey, a third survey shall be conducted. Each separate survey shall be walked in a different direction to allow opposing angles of observation. Clearance surveys of the plant site may only be conducted when tortoises are most active (April through May or September through October) unless the Project receives approval from CDFW and USFWS. Clearance surveys of linear features may be conducted during any time of the year. Any tortoise located during clearance surveys of solar arrays shall be translocated or relocated and monitored in accordance with the Desert Tortoise Translocation Plan (DTTP; Mitigation Measure 3.4-2b) a. *Burrow Searches*. During clearance surveys all desert tortoise burrows and burrows constructed by other species that might be used by desert tortoises shall be examined by the Designated Biologist, who may be assisted by the Biological Monitors, to assess occupancy of each burrow by desert tortoises and handled in accordance with the USFWS *Desert Tortoise Field Manual* (USFWS, 2009d). To prevent reentry by a tortoise or other wildlife, all burrows shall be collapsed once absence has been determined in accordance with the DTTP. Tortoises taken from burrows shall be translocated as described in the DTTP. b. *Burrow Excavation/Handling*. All potential desert tortoise burrows located during clearance surveys shall be excavated by hand, tortoises removed, and burrows collapsed or blocked to prevent occupation by desert tortoises in accordance with the DTTP. All desert tortoise handling and removal and burrow excavations, including nests, shall be conducted by the Designated Biologist, who may be assisted by a Biological Monitor in accordance with the USFWS *Desert Tortoise Field Manual* (USFWS, 2009d). 4. ***Monitoring Following Clearing.*** Following the desert tortoise clearance and removal from the power plant site and utility corridors, workers and heavy equipment shall be allowed to enter

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	the Project site to perform clearing, grubbing, leveling, and trenching activities. A Designated Biologist or Biological Monitor shall be on-site for clearing and grading activities to move tortoises missed during the initial tortoise clearance survey. Should a tortoise be discovered, it shall be relocated or translocated as described in the DTTP. 5. ***Reporting.*** The Designated Biologist shall record the following information for any desert tortoises handled: a) the locations (narrative and maps) and dates of observation; b) general condition and health, including injuries, state of healing and whether desert tortoise voided their bladders; c) location moved from and location moved to (using GPS); d) gender, carapace length, and diagnostic markings (i.e., identification numbers or marked lateral scutes); e) ambient temperature when handled and released; and f) digital photograph of each handled tortoise. Desert tortoise moved from within Project areas shall be marked and monitored in accordance with the DTTP.
APM 7. The Applicant shall limit the speed of vehicles traveling on unpaved roads and disturbed areas to 15 miles per hour. **APM 62.** Project personnel and visitors will be instructed to drive at low speeds (<15 mph) and be alert for wildlife, especially in low-visibility conditions. **APM 35. Preconstruction Surveys for Rare or Special-status Plant Species and Cacti**. Before construction of a given phase begins, the Applicant will stake and flag the construction area boundaries, including the construction areas for the solar arrays and associated infrastructure; construction laydown, parking, and work areas; and the boundaries of all temporary and permanent access roads. A BLM-approved biologist will then survey all areas of proposed ground disturbance for rare or special-status plant species and cacti during the appropriate period (blooming or otherwise identifiable) for those species having the potential to occur in the construction areas. All rare or special-status	**Mitigation Measure 3.4-5a: Minimize Vehicle and Equipment Impacts during Operation and Maintenance.** The Applicant/Owner shall implement measures to minimize the potential for desert tortoise and other wildlife species mortality along access and maintenance roads. These measures shall include: 1. A speed limit of 15 miles per hour will be maintained on all dirt access/maintenance roads, and all vehicles must remain on designated access/maintenance roads. 2. Pedestrian access outside the limits of the designated access/maintenance roads is permitted year-round as long as no ground-disturbing activities take place. 3. Vehicle traffic and parking shall be confined to designated access roads, and equipment and materials staging areas shall be clearly defined to avoid impacting habitat during the operation phase.

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plant species and cacti observed will be flagged for transplantation.	